

NEW WORLDS SCIENCE FICTION

No. 93

VOLUME 31

2/6

THE FOURTH POWER

John Brunner

THE JARNOS AFFAIR

Lan Wright

MAN OF WAR

E. C. Tubb

Serial

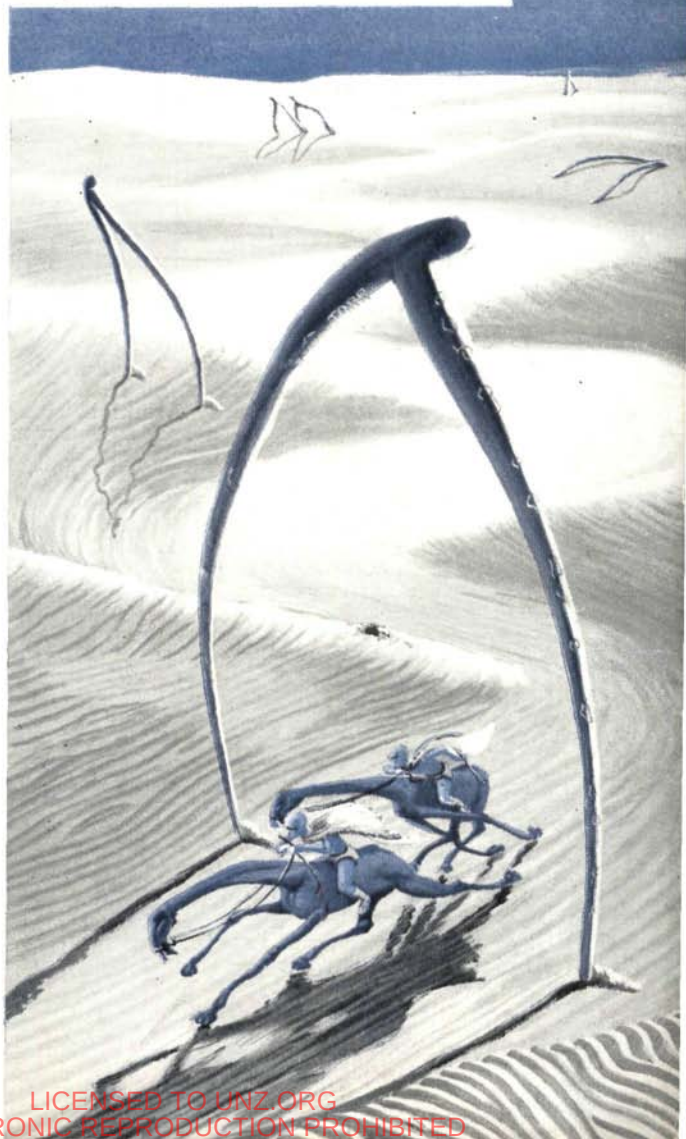
X FOR EXPLOITATION

Part Two

Brian W. Aldiss

Features

**14th Year
of Publication**



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NEW WORLDS

PROFILES

John Brunner

London



"THE FOURTH POWER," author Brunner states, was first-drafted in a fourth floor flat in Brussels in October of last year. It was my first story in many months, because my wife and I were touring Europe with a nuclear disarmament exhibition. We covered seven countries in four months.

"I think it was probably this circumstance which got me thinking about what I consider the important aspect of this story—the concept of the synthesist. We need something of this sort, and we need it *fast*. We inhabit a shrinking planet. Unless we achieve some method of ironing out the glaring differences in our world, we're liable to be unable to make use of our own major discoveries.

"Superficially, of course, world-wide homogenising is in progress. But that applies to juke-boxes, Italian shoes and General Motor cars—not to fundamentals. Even in Europe, which is a local district of Earth these days, tremendous discrepancies can be found. The standard of living in Britain, for example, is markedly lower than that of the other countries we visited last year, except France's—and France has been at war for over twenty years non-stop. In Sweden and Denmark, things that the British consider ultra-modern are already thirty years old and slightly out of date. We have our Motorway—but the *Autobahnen*, which enable a fast car to cross Germany in eight or ten hours, date back to the thirties.

"And within a day's air travel, you can find medieval feudal societies in the Middle East.

"Some technique like synthesis has got to be found, and not just on the scientific level—on the social level as well."

NEW WORLDS SCIENCE FICTION

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MONTHLY

CONTENTS

Novelettes :	
The Fourth Power	<i>John Brunner</i> 4
The Jarnos Affair	<i>Lan Wright</i> 48
Short Story :	
Man Of War	<i>E. C. Tubb</i> / 31
Serial :	
X For Exploitation Part Two of Three Parts	<i>Brian W. Aldiss</i> 78
Article :	
Outward Bound (7)	<i>Kenneth Johns</i> 72
Features :	
Editorial	<i>John Carnell</i> 2
The Literary Line-Up	 123
Postmortem	<i>The Readers</i> 124

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Soul Searching . . .

One aspect of being an editor which more than compensates for the arid periods of manuscript reading, is the element of surprise in the positive reaction from readers on one or another aspect of science fiction which I have passed over as being perhaps mundane or unlikely to arouse any special interest from more than a few ardent followers. Often it only concerns a cover painting or a story—and the surprise is pleasurable when readers take the trouble to write in and debate the point. Stimulating interest is the primary task of any editor although that interest can be expressed in a variety of ways.

The biggest surprise I have had for a long time, however, has been the reaction to last month's Editorial on the 'soul searching' going on in some sections of the community. Correspondence is coming in from both sides of the fence—readers and authors alike—and although everyone has varying explanations as to what is wrong with science fiction and just as many solutions for solving the problem, the underlying factor on which they are all united is concern that such a state of affairs exists.

Whether it *does*, in fact, exist outside of the individual's mind, or whether it is the individual tilting against the changing pattern of modern s-f, we shall doubtless see in the *Postmortem* section of future issues. This month author John Brunner touches off the debate by expressing several aspects of the case as he sees it. Other letters will follow which will broaden the discussion, because most people are trying to express their opinions from a *personal point of view*; how they prefer science fiction—more science or less science, space stories, human-interest stories, greater imagination in the plots, and the repeated request for *New Worlds* to radically experiment with stories that are 'different.' This I am quite willing to do if any of the authors submit such stories, providing the literary standard is maintained.

One correspondent even states that the very name "science fiction" is now damaging its popularity and asks whether we could scrap it, find a new one, then start all over again. A

... Continued

point which has been thrashed out for many years without a satisfactory solution having been found.

What is apparently frustrating so many readers is the fact that good s-f is not so easy to find as it was five years ago. Few hard cover books are appearing in Great Britain actually labelled as science fiction although in actual fact, there are almost as many appearing today as there were in 1955—only they aren't labelled as such and the titles give little indication that they belong to the s-f genre. They are streamlined for the general novel market and are far more everyday in theme than the great novels of a decade back—*which were written originally for the magazine market as serials*. The day of the mighty opus as defined by Kuttner, Smith, van Vogt and others is temporarily over.

Because the story style has changed and the new authors' names are unknown I surmise that many older readers are subconsciously thinking that s-f is in the doldrums; that without the great names of the recent past to add weight to its name it isn't science fiction as they knew it. Frankly, it isn't, but it is all part of the changing pattern of literature in general, not science fiction alone.

It may well be that with s-f more difficult to find, the magazine markets will again assume their former eminence, for the short story is still the mainspring of the genre and this section of the literature is a very long way from being dead, despite the gloom in some quarters. Certainly the paucity of material 25 years ago bred a die-hard group of readers who have, in the main, remained loyal to s-f for a quarter of a century. Perhaps serving an apprenticeship in those early days and progressing with the growth of the literature gives older readers too large a background upon which to observe the rate of change. Newer readers seem to have far different ideas as to what science fiction should be about.

However, this 'soul searching' is one of the healthiest signs I have seen for a long time. While it prevails there is little chance of the genre becoming completely eclipsed or pushed too far away from the already well-defined path.

John Carnell

Given the power of developing parallel mental processes—being able to do two or more things simultaneously and efficiently—what kind of a superman would be produced? As author Brunner asks, "What's different from a Man, and everything else that ever was?"

THE FOURTH POWER

by JOHN BRUNNER

Wheelwell was nervous. The palms of his hands itched with perspiration. He rubbed them on his handkerchief surreptitiously and tried to persuade himself that the feeling was due to the presence of Norstein. Norstein's calm gaze invariably conveyed the impression that to him any human being was merely a piece of imperfectly functioning machinery.

Anyone would think it was I who was going to be the guinea-pig, he told himself irritably. He cleared his throat and looked around the lab.

There were four people here who really mattered; the technicians running last-minute checks on the circuitry didn't count. There was himself; Holiday, who had discovered the effect; Norstein, who had proposed the experiment; and Smith. Smith had put the original two and two together and catalysed this chain of events. That was his job—he was a synthesist.

Wheelwell tried not to look as though he was staring, but he could hardly take his eyes off the man. He had discovered since taking on the post of research administrator for the

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Foundation that he was a better business man than he ever had been a scientist, despite his master's degree in chemical physics. Perhaps that was why he found it hard to understand the inherent dislike specialists felt for synthesists. "Jumped-up jacks-of-all-trades" was about the kindest word a follower of a specialised discipline ever had for them. Yet they were inoffensive enough—colourless young men with glasses, conservatively dressed, bearing commonplace names, who resembled each other as closely as brothers.

And imperturbable! Smith sat in his not-very-comfortable chair with his legs crossed and his eyes half closed, as if he were doing nothing more demanding than waiting for a bus.

What was he waiting for? What did he expect might happen? Wheelwell could read no answer in the placid face.

He glanced at Holiday, and found that there he could read the expression only too clearly. The black-haired young physicist was almost chewing at the stem of his pipe; his thin, white-knuckled hands with the powdering of short black hairs on the back were drumming at the arms of his chair. The delay was preying on his nerves. Now he took the pipe from his jaws and jabbed the stem in Smith's direction, posing the very question Wheelwell had been longing to ask.

"Hey! Mister llama-keeper! What exactly do you think is going to come of this?"

Smith came alive as though a switch had been pressed. He gave a dry, pleasant chuckle. "Llama-keeper! Not bad, Dr. Holiday. Not bad at all."

Norstein blinked and growled something interrogative, and Smith turned to him. "Llamas are a hybrid species. They have difficulty in reproducing their kind without—uh—manual assistance. Dr. Holiday was referring to our job of cross-fertilising over-specialised disciplines. It's a very good analogy."

Holiday had just realised that if one pushed the implications of his remark to their conclusion, they were less flattering to specialists than to synthesists. He scowled, and Smith hastened to answer his question.

"Why—I wouldn't really like to say what I expect, doctor. After all, we haven't got much to go on, have we?"

"There was a whole slew of cats and monkeys and things you tried it on first," Holiday grunted, jamming his pipe back in place.

"I'm afraid they didn't tell us very much," Smith murmured. Norstein leaned forward. "They told us a great deal," he contradicted. "We can say that to some extent they stopped thinking—or rather reacting—like themselves. The drawback is that we can't understand the process in any readily definable terms. If we knew what it *felt* like to be a cat or a monkey, we'd have made a lot more sense out of what they told us."

Wheelwell remembered those cats and monkeys; he'd seen a lot of them. He thought they looked pitiful. *Haunted* was the term he was tempted to employ. As though, after having been cats and monkeys all their lives, they'd suddenly started to think like—like *not*-cats, *not*-monkeys. Like nothing ever known.

He'd said something of the sort to Norstein; Norstein had scoffed a little, but in his usual compassionate way.

"The rig checked out," said a technician off-handedly, passing with a sheaf of circuit diagrams in one hand and a voltmeter in the other. The four waiting men exchanged glances and stood up.

"A few tests first, then, Smith," Norstein suggested, and Smith stretched himself out obediently on the operating trolley they had ranged alongside the induction mechanism. Lips pursed as though he were whistling an inaudible tune, Norstein ran the standard series of reflex tests, measured sweat secretion rates and blood pH, and several other things Wheelwell did not recognise.

The first time he had met Smith, he remembered . . .

The synthesists' visits ran as much according to a pattern as did the synthesists themselves. A colourless voice on the outside phone would say that Mr. So-and-So of the Department of Synthesis, Board of Research and Development, would be with him in ten minutes if that was convenient. It always was convenient; it had to be.

Wheelwell had been in his office, checking proofs for the Foundation journal which was due to appear shortly. When he heard the news, he debated with himself whether to be relieved or alarmed. Then he concluded that it was easier to stand a burst of Holiday's unpredictable behaviour than the entirely predictable inquiries of the board of trustees as to why he had persisted in spending money on a line of research the experimenter himself had described as hopeless, and was smiling when Smith arrived.

"I'm glad you're here," he began. "As a matter of fact, I'd been considering calling your department and asking for someone to drop by ahead of schedule. We've got something to interest you."

Smith nodded. "The chances are your request would have been denied," he said matter-of-factly. "Nine times out of ten, only a synthesist can say what will interest a synthesist." He adopted an interested expression. "This may be the tenth time, though. May I have the details?"

Wheelwell shuffled through the heap of proofs till he came to the article he wanted. He passed it across the desk, and Smith read it silently. Meantime, Wheelwell mentally reviewed what it said. He didn't understand it himself; nobody did, so far, but he had seen it in operation, and that helped.

In itself, the phenomenon was slightly remarkable. There was this circuit, an ordinary loop of silver wire—only it had a gap in it. Assuming certain physical conditions were fulfilled, nonetheless, a current of the order of a few millivolts induced *here* produced an identical reading *there*. And it didn't matter what was in the gap in the circuit—air, an insulator, a conductor, a bar magnet, high vacuum, nothing influenced the current.

"The author's done an excellent job of proving what it's *not*," said Smith thoughtfully. "Not transmitted on any detectable band of radiant energy; not a resonance phenomenon. Not anything. What does he think it is?"

He glanced at the title of the article again as though to stamp the author's name on his memory.

"Holiday says it's a good parlour trick to have around a lab," Wheelwell acknowledged candidly. "And that's all."

Smith looked as much astonished as he ever permitted himself to look. "Really? But you disagree with him."

"Well—yes. If it had been anyone else but Holiday, I might have been inclined to take the discoverer's word for it. He maintains that it's too limited: the maximum current is a few milli-volts, the maximum range is a few inches. But . . . Holiday is very young, and regards himself as more brilliant than he probably is. I believe he expected to be invited to the Institute for Advanced Study, and it galls him to be working with a commercial research foundation. So you see I can't accept his dogmatic assertions as a genuine desire to save

wasting time on a fruitless line of investigation. Rather, I think he hoped this would be the discovery that made him famous before he was thirty, and because it isn't, he wants to scratch the surface of something new."

"Ye-es. And—?"

"And I can't think of any physical principle that is to be dismissed as useless. And . . . Well, I'll tell you an illuminating story. A few months ago, when he first told me he'd hit a dead end, I—uh—I suggested turning it over to a synthesist, knowing that he was going to be sufficiently annoyed at the suggestion to go back to the job. But that was not enough, so I sent him a memo suggesting that he draft the paper you've just read and proposing as a title *The Holiday Effect*. He sent the memo back with his answer scribbled on the blank side; he said, "I'm saving that name for something which *does* something."

Smith nodded. "Unfortunate," he muttered. "Can you spare me a copy of this article? You were quite right—this is the tenth case. As far as I know it's quite new, and when we turn it loose I think Dr. Holiday will regret not having officially attached his name to the effect."

"You—uh—know already where it's going to—?"

Smith shook his head. "Of course not. But it has the right sort of—of smell, as we say in my profession."

Wheelwell glanced down at the top of his desk. "I might mention that the first idea I had was to propose it as a switching mechanism for computers—only it's highly non-directional, and one of our computer men figured out that to employ the principle for switching would involve a set-up costing an additional million and a quarter and nearly as big as this room. Before you got around to saving anything."

"Ye-es. But there are other fields where milli-volt currents do more than anyone would believe possible."

And the answer to that enigmatic parting remark was to be found in this room, of course, Wheelwell reminded himself.

More to the point, perhaps, the answer was right behind his eyes.

He had been very surprised when Smith came back a week later with Norstein, whom he introduced as a neurologist; more surprised than ever when he had had experience of Norstein's company and found him to talk more like a cybernetics man than a member of a biological discipline.

But it had begun to clarify a little when he learned that among Norstein's other tasks he was responsible for the selection and training of synthesists . . .

"Synthesis *works* !" he had said loudly, leaning forward—they were again in Wheelwell's office at the Foundation—to glare at Holiday. Holiday had early acquired the standard attitude towards synthesists, and had made the mistake of giving voice to it.

"All right, so it works," Holiday had shrugged. "Sometimes."

"If it worked once in a million cases it would be worth while," Norstein emphasised. "It works better than that ; but we've got to make it work better still. I don't suppose you know as much about what goes on under your scalp as you do about the—the pi meson. Hey ? There's a whole universe of electro-chemical phenomena in there ; there are more neurone connections, speaking theoretically, than there are atoms in the universe. In one human brain. Only we can't use them." He added the last sentence in a tone of disgust. "Why not ? Well, some of them are damaged, or spoiled by metabolic malfunctions. Some of them—a hell of a lot—are forever tied up with regulating non-conscious body functions. That still leaves a tidy number. Only we can't even use *that* many. We forget, and although we can dig the information out sometimes, by directly stimulating the brain with electrodes, for example, that's not much use.

"Now Smith here has his head very nearly as full of knowledge as is conceivably possible. He's a synthesist. We've taken him and stuffed his mind full by every technique we can imagine: hypnosis, sleep-learning, tachistoscopic acceleration of up-take drugs . . . He's good. They're all good. But they aren't good enough.

"Now the ordinary neurone connections in the brain operate in our customary three dimensions. It's a hell of a sight more complex than that, but you can picture a kind of conventional cybernetic switching system if you like. Only while most such systems are used to store fact, in the shape of binary digits, our storage system is full of referents to events and processes. We don't yet understand the coding system the brain employs to break down sensory stimuli into 'memories'—but we're on the edge of it. With me so far ?"

Holiday scowled and nodded.

"Good! Now I said the ordinary neurone connections work in our conventional three dimensions. But they have a great advantage already—one charged neurone may form part of a hundred, a thousand different code entries in the memory. It seems to depend on the direction in which the entry is made, but if there's anything within reach, so to speak, which can be utilised in formulating a new code entry, then it'll be employed." He seized a sheet of paper and drew a tick-tack-toe game on it, filling the squares with noughts and crosses in strict alternation.

"Over-simplifying, let's say there's a new memory acquired whose code is *oxo*." He drew a straight line through the appropriate symbols. "Now another comes along, which is coded *xxo*. The *xo* combination already exists, and is in use. But the brain sees nothing wrong in using it again, understand?" He drew an angled line to connect an *x* on the line below with the *xo* he had already struck through.

"Even so, our brains' *cubic* capacity is limited. What we are looking for is the fourth power. We want to be able to cross-refer an *x* on the bottom line with an *o* on the top line and another *x* on a different sheet of paper."

Holiday's mouth was opening slowly in an undignified gape. He said feebly, "But how about directionalisation?"

"The brain won't care, Dr. Holiday. There are plenty of neurones to play with. So long as the connection can be made, it doesn't matter a hoot in hell whether the end of the series is above, below or to the side of the beginning."

The fourth power. Wheelwell liked that analogy; it was crisp and literal and concise. Only . . .

Only it had overtones. Most of them belonged to the word *power*, as Wheelwell kept telling himself. The aim and purpose of the programme Norstein had set in motion was merely to make synthesists better synthesists, nothing else—and that was a crying need. With hundreds of minor discoveries being made in each of the specialised disciplines, and no specialists being able to comprehend the needs of others in fields that did not directly impinge on his own, the synthesists had been a godsend. Hadn't they given social matrix mathematics its basic tool, borrowing it from an obscure set of functions used previously only in a narrow line of radiation decay study? Hadn't they given astrophysicists a new and powerful tool for the analysis of stellar distribution by introducing them to

an empirical device of the market research people? Hadn't they—?

But there was so much *more* to be done! The proponents of synthesis as an officially-sponsored discipline had argued from Hero of Alexandria's steam turbine, stating what was probably impossible to deny—that under the nose of the world there were a million similar potentially useful bits of knowledge which were either being employed for something ridiculous, or not being employed at all. The master-slave society of the day had prevented the adoption of Hero's turbine as a useful device; how many other curiosities were there in this twentieth century of which posterity would say the same?

And yet—*power* . . .

Holiday had come along with him a couple of times to see the experimental animals on which the principle had been first put to the test. He had remained hidden behind his armour of scepticism for the most part—out of vanity, Wheelwell believed—but had so far relented as to baptise the effect with his name after all. The experimental animals, though, left him cold.

"Don't look any different from usual to me," he grunted, his pipe jutting up at an aggressive angle. "These the ones that have been treated?"

"That's right," Wheelwell agreed.

"Uh-huh. What sustains the process in operation?"

"It doesn't need sustaining, as Norstein explained it to me. He said that in a new-born child, for instance, most of the nerve channels are totally blank, but available to accept stimuli. You've watched a baby learning to see, I guess—learning to recognise the difference between something within reach and something beyond. After a while the adjustment is automatic."

Holiday nodded.

"Well, it turns out that your principle can be applied on the same basis by a living brain. Once it's been taught to utilise non-spatial neurone connections—"

"Non-spatial?" Holiday took his pipe out and stared at his companion. "Where in hell did you get that piece of portmanteau terminology?"

Wheelwell felt put on the defensive. "What else do you want them called? Non-spatial is a good descriptive term;

it will do until we figure out exactly what does happen to the current, won't it?"

Holiday shrugged. "Of course the current flows through space. Only it doesn't flow through *all* the space. You'll be postulating a five-dimensional super-continuum next, just because it's a handy mathematical way of describing what happens. It's an analogue, that's all. Sorry—you said?"

Wheelwell had to ponder a moment before remembering where he had broken off. "Oh—yes. According to Norstein, it's possible that some people gifted with eidetic memory have discovered the possibility of using such neurone connections by chance. He compared it to learning to walk. Once you can control your feet sufficiently well to put one in front of the other, you can walk on any kind of road, upstairs, even along a tight-rope, without adjusting the basic mechanism."

"So?"

"So he just induces a few random connections in the brains of these animals, and after a bit their behaviour changes in a significant manner. Two of the monkeys have exhibited a rise in IQ—one of them was a real moron, but has now learned to pile boxes on top of each other to get at bunches of bananas overhead. You know—standard monkey intelligence test."

"Was it one of these?" Holiday was staring at the caged monkeys. None of them were doing anything at all, except look out at the world with big, miserable eyes. Occasionally they scratched themselves or made water.

"I don't know."

"I don't very much want to know," Holiday decided with an abrupt turn on his heel. "Come on, let's get out of here. These crazy apes give me the jitters."

"I feel the same way," confessed Wheelwell, following. "I get the idea they just aren't being monkeys any more."

They were taping electroencephalograph connections to tiny patches shaved on Smith's head now. Wheelwell fumbled in his pocket for a piece of candy and chewed on it to slacken his ever-growing tension.

Monkeys and cats and other animals had indicated significant possibilities. That was all. To *know* what the effect of the change was, one had to try it on an animal that could answer Norstein's questions.

Smith.

They selected the synthesist for a variety of reasons, not least among them the fact that they had data on his intelligence, his reactions and most of his bodily functions dating back over several years, since he was first recruited to the Department of Synthesis. Another reason was that a synthetist was trained to winnow knowledge, to select the important from the unimportant. And then, of course, there was the fact that he practically demanded to be allowed to undergo the process.

The tension grew to be unbearable as Smith took his place before the banked dials of the induction mechanism. Wheelwell glanced around. Holiday had departed to supervise the induction; Norstein, of course, was standing beside Smith. Only Wheelwell was left with nothing to do. He wrung his handkerchief between his sweating hands.

Norstein performed a series of extraordinary antics next. He shouted loudly in Smith's ear; then he flashed a bright light in his eyes. Then he read a few lines from *Hamlet* and drew the graph of a mathematical function on a small blackboard propped within easy reach. Finally he asked Smith a riddle—quite an amusing one, to judge by Smith's grin in response. He received a correct answer.

And they were coming back from the stand. It was over. Wheelwell felt the tension in his stomach begin to reduce. There was no change—of course. It would have been stupid to expect a visible transformation in Smith. And yet he couldn't help thinking there should have been *something*. A light in his eyes, perhaps. A sort of distant look. That would have satisfied his need.

Holiday came down from behind the banked equipment, leaving the technicians to take the final readings. He gave Smith a sharply questioning look.

"Well, any results?" he demanded.

"What sort of results do you expect at this moment?" Norstein countered irritably before Smith could reply. "Damn it, an ordinary aspirin tablet doesn't work in a twinkling of an eye!"

"It'll be a day or two before anything measurable happens," Wheelwell soothed the annoyed Holiday. "What are you going to do now, Dr. Norstein?"

"Just run one more e.g. check, that's all," Norstein told him, glancing at the paper band as it spilled from the machine. "Right—no change. We'll settle you in the presidential suite, okay, Smith? And await developments."

Smith nodded. Now, for the first time, Wheelwell was glad to see signs of tension developing in the man's hands—how the fingers bent over to dig into the palms. He had begun to think that Smith had nothing in the way of ordinary human reactions.

The presidential suite—baptised by Holiday—was an apartment adjoining the lab, furnished on a magnificent scale by borrowing the ingredients from the homes of members of the Foundation staff. The library had been ransacked to provide books on every conceivable subject; there was a big bathroom, a splendid bedroom, a lounge with television, radio, record player, computer, drawing-boards. They had no idea what to expect; a dozen brain-storming sessions had produced the odd mixture of appliances.

They went into the lounge and sat down in an air of expectancy; they all found themselves looking at Smith, who gave them a wry smile.

"I think I'd like a drink," he said.

Wheelwell glanced doubtfully at Norstein, but Holiday was already on his feet. "Good idea," he said shortly, and was crossing to the liquor cabinet. He mixed their orders and came back to perch on the extreme front edge of a soft armchair, cradling a whisky sour between his hands.

"Y'know, Smith, this—trip of yours has me scared green," he said abruptly.

Smith gave him a gently questioning glance.

"Oh, I don't know," Holiday went on. "I just wonder about it . . . This is Norstein's line, not mine, and I've said so many hard things about synthesists I'm going to respect a fellow specialist's competence to keep the record straight. But—what are we expecting to happen?" He raised his eyes to Norstein.

"You want to increase the available memory capacity of a synthesist, and that's all. But supposing it isn't all. Say for the sake of an extreme example Smith here gets superman-intelligence out of this—fourth power we're giving him."

"Superman is still man," said Norstein off-handedly. "I remember beating that one out a hundred times in college. What have you in mind? That Smith will see the solution to the world's problems in one blinding flash of insight, and stop at nothing to set them right?"

Holiday hesitated. "Over-simplifying, I'd say—yes."

Norstein glanced at Wheelwell. "And you?"

Wheelwell spread his hands. "I'm a research administrator; I've learned I'm better at that than at speculative research itself. My job is to tell the staff committee what they can have—after they've told me what they want. But"—and he felt a note of anxiety creep into his voice—"I saw your experimental animals. I think Smith is going to be very unhappy."

There! He had said it. It was too late—but before, it would have carried no weight. Why had he bothered to say it at all? To have the satisfaction of Cassandra and see his gloomy forebodings come to pass, maybe.

He looked at Smith, who was sipping his drink slowly and without taking his glass away from his lips. He waited for a comment.

"There's one point to be considered," Smith said thoughtfully after a pause. "The experimental animals didn't know what was being done to them—how could you explain the Holiday Effect to a cat? I do; I'm at least prepared for *something* to happen. And according to our best-informed guesses, that something will take the form of an increment of memory." He set aside his empty glass after swigging the last drop.

"And I've always got my kicks out of my memory. I recall in school I used to bother people by repeating word for word something they'd said months previous. They used to send for me to settle arguments, you know? Where I'd been a witness of what happened. I used to be prompter when they put on plays in college—I read the play a couple of times and that was it. Never worried with a text."

He shrugged. "I expect to enjoy myself in much the same way as I did when I was a kid and first found out what I could do in the way of tricks like that. No, I don't think I'm going to be unhappy."

Wheelwell debated for a moment whether he ought to utter the next remark he planned; then he thought, *what the hell?* "Dr. Norstein," he said, "how about the—the other functions which tie up neurone connections?"

"Oh, they'll tie up a certain number of the connections we make available now. The same percentage, probably. I've told Smith already that this may make him physically more efficient—we're going to rely on him to win the gold medals

at the next Olympics." He grinned. Smith gave a tired smile in appreciation.

"I'd like another drink," he said. Norstein nodded.

"But make two your limit, will you? The new connections are probably stamping themselves already; we don't want a significant number of them fouled up with alcoholic overtones."

Smith nodded and went and got himself the second ration; this one he husbanded carefully. "Mescaline would be interesting," he said wistfully, and Norstein shot him a sharp look.

"Why?"

"Oh—because the nature of reality is still a metaphysical speculation even if our method of perceiving whatever this reality is has been pretty well hammered out. A hallucinogen on top of the Holiday Effect ought to produce some crazy kinks in one's mental space-time."

That's it.

Wheelwell glanced round involuntarily, half expecting to see someone standing behind him with a feather, brushing the back of his neck. Only it hadn't been the back of his neck—it had felt more as though it was his bare brain. He lost the next part of the discussion in concentrated analysis of that unheard remark.

That's it. That's what? he demanded angrily of himself, and then spelt out the reply. That was what had been worrying him—not something he could formulate precisely, for it would have taken a philosopher to convert it into accurate terms, but an intuition, a—*a*—a smell, as Smith would call it.

When does a change of magnitude become a change of nature? Often; many cyberneticists had used analogy to argue that consciousness, self-awareness, was not a unique and special characteristic of human intelligence, but an automatic by-product of complexity. Somewhere between *here*, they promised with one hand on an ordinary desk computer, and *there*, with a wave in the future direction of a planetoid-sized super-robot, we'll pass the limit and the miracle will happen. No miracle. Just an inescapable consequence.

The change of nature between the cats, to whom one could not explain the Holiday Effect, and the man, who understood it pretty well, was probably on a level an inch or two above

the apes. Maybe they should have waited a little longer ; maybe they should have attempted to communicate with the apes that had been treated . . .

Wheelwell remembered the unpleasant feeling he had had on looking at the experimental animals. The treatment hadn't made them *more* cat, *more* ape. It had made them different.

What's different from a man, and everything else that ever was ? He didn't know. He only hoped it wasn't going to be called Smith.

He carried the queasy disturbed feeling away with him when he left the lab and went on home..

At first he found himself calling Norstein every couple of hours, until Norstein had a fit of irritability and slammed the phone down. After that, he confined himself to daily inquiries. There was nothing to justify even that frequent an interrogation

At first, Smith behaved just as anyone would, left to do nothing in a comfortable apartment. He read voluminously—but then, Norstein remarked, he'd been doing that since he was five years old. Sometimes he played records or watched the TV. He wrote several letters to friends. Each day he underwent a thorough check of his physical condition, and an exhaustive series of e.e.g. readings. No change.

After a week he decided he wanted to learn to play the guitar ; he spent four days doggedly fumbling his way through a series of exercises and then began to pick out tunes by ear. Norstein was jubilant when Wheelwell called him after this innovation.

"I tell you, there just wasn't room in that boy's memory for the auditory and kinesthetic information involved in playing an instrument. Damn it, I cleaned out hunks of his brain myself to make extra room. And so far as we can determine he hasn't forgotten anything he knew previously. This indicates that the treatment took. Tell Holiday, will you ?"

"Certainly. Look, would you mind if I came down and called on Smith this evening?" Wheelwell wondered what the answer might be ; he was vaguely surprised when it came.

"An excellent idea. We'll invite ourselves to have dinner with him, how about that ?"

"Perfect," said Wheelwell mechanically. "About seven ?"

Norstein met him in the outer lab, shaking his head with a look of wonder on his face. "He decided to add another field to his scope," he said. "So he read *The Golden Bough* and the whole of Margaret Mead's published work. He said he'd have a good grounding in anthropology by the beginning of next week ; it interests him. I'm telling you here and now, Wheelwell : by the time Smith gets through, we'll have to invent a new word for him. 'Synthesist' just won't be adequate."

"What's different from a man, and everything else that ever was?" said Wheelwell under his breath, and Norstein blinked at him in puzzlement. "I'm sorry. He knows we're coming?"

"Of course." Norstein threw open the door to the presidential suite, and a blast of music hit them—a guitar recording turned up to maximum volume. Smith was sitting beside the record player with his head bowed over a book ; he didn't glance round as they entered.

"Make yourselves comfortable," he said—or rather shouted above the tremendous noise of guitar. "Help yourselves to drinks. The food will be here soon. Excuse me going on with this—I've nearly"—he turned a page—"finished it."

Wheelwell lowered himself into a chair. "This is new!" he said in low tones to Norstein.

"What? This lack of courtesy in receiving us?"

"No. You—you mean you haven't noticed?" Wheelwell gestured at Smith, and Norstein turned to look.

About four bars before the record ran off into its payout groove, Smith had placed his book open on the table in front of him ; as the music finished he lifted the lid of the record player with one hand, changed the record over—it wasn't an auto-coupling—and lowered the stylus ; turned the page of his book ; lowered the lid of the player and picked up the book again without having taken his eyes off it.

"I don't see what's troubling you." Norstein frowned. "I often read and listen to music at the same time."

Wheelwell was aware that he was trembling slightly. He raised his voice. "Smith ! What key's this piece in?"

Smith didn't look up. "E major, mostly—he just modulated into A but he's cycling back."

"And how's he doing that?"

"Added seventh—D—D seventh with added ninth—F sharp—minor—major again—enharmonic assumption of the G flat—D flat—enharmonic again, treating it as C sharp. Experimental. Rather interesting. He gets off the C sharp neatly with ascending arpeggios." Smith sounded very casual. His eyes remained fixed on his book ; he had turned two pages while speaking.

The ascending arpeggios were arriving as Wheelwell turned to Norstein.

"And you still don't see what's troubling me?" he said in a pleading voice. But Norstein did see.

"It's eleven days now," he said thoughtfully. "He's been taking an interest in music for four. And now he can analyse harmonic structure by ear without interrupting his reading, and talk at the same time. He has a book on harmony which came with the teach-yourself-guitar record." Norstein knew that didn't explain anything. He sat back in his chair.

"Well, parallel mental processes are nothing new."

"Maybe not," grunted Wheelwell. "But all the cases I've ever heard of suffered from some sort of compensatory disadvantage. They couldn't do two things *brilliantly* at the same time. Why not run a few checks on Smith in the morning and find out what he can do simultaneously?"

The waiter from the Foundation canteen knocked and brought their dinner. Through it they talked of miscellanea ; Smith seemed to notice nothing wrong, but Wheelwell kept finding himself with his eyes on his plate, saying nothing, thinking over and over again : *what's different from a man . . . ?*

Holiday happened to be in Wheelwell's office the next morning when Norstein called to describe the results of the tests he had just run. Wheelwell gestured for Holiday's attention as he hung the phone on the amplifier.

"I think you ought to hear this," he suggested. "Go ahead, Norstein."

Norstein seemed to be choosing his words with care. "It isn't that he can do anything very spectacularly well," he began. "After all, Smith's had a reading speed of two thousand a minute since before we got hold of him and he's always had a phenomenal memory. It's what he can do . . ." The voice tailed away.

"All at once?" Wheelwell prompted gently.

"Right. Now for instance, we gave him a math problem or two to work out in his head. Slow ones. And handed him a copy of a poem to memorise. Asked him for the solutions to the problems and took the book away. He'd memorised the poem while he was doing his calculations."

Holiday was leaning forward with tense interest.

"So we asked him to write a—an essay on nothing in particular, read aloud to him while he was writing, and showed him a series of tachistoscope images at the same time. Didn't faze him; he reeled off the sequence of images, recited what had been read to him, *and* turned out quite an interesting essay. I'm going half out of my mind trying to think of *four* things we could ask him to do at once."

"Does he himself seem to realise anything's different?"

"Well, of course he does. But all these tests we're giving him are ones he's run before, or something like. Only we pile them up three at a time now. I've got three assistants putting him through a treble IQ test—verbal, read aloud, visual, presented on a screen, and mathematical, memorised in advance. I've got a pretty good idea what it's going to show."

"What?"

Wheelwell thought absently that he didn't remember saying that; then he realised it was Holiday who had spoken. The physicist was clamping down on the stem of his pipe with his lips drawn back in a near-snarl.

"Smith is going to check out on all three tests just about as well as he would have done previously—if he'd taken them in sequence instead of all together." Norstein's voice revealed nervousness. "It's not an increment of IQ in the strict sense. It's—a talent. Where's he going to go from here? Not *up*, I imagine. More sort of—outwards."

The connection broke with a click, and Wheelwell hung up his own phone. "Well?" he said to Holiday. "What do you make of that?"

Frowning, the physicist debated his answer. "It seems like a logical result," he mused. "It's Norstein's field, not mine—but I'd say if I'd been asked, that would have been a possibility I'd have thrown out." He sucked loudly at his pipe, found it had gone out, and pocketed it.

"You know something? He scares me."

"Who? Norstein?"

"No, Smith, of course. I think that's why all we specialists detest synthesists. At bottom, we're jealous, because we know they're hand-picked, the cream of the genius crop, and yet we wouldn't change places with them because of the treatment they get from specialists. We're grateful to them, and at the same time we regard them as a damned nuisance. They make us feel inadequate. And telling ourselves that a world full of synthesists wouldn't make much headway doesn't help."

Wheelwell felt as though a great event had taken place; for the first time he found himself on an open footing with this able and erratic young researcher. Trying to preserve the mood, he said thoughtfully, "That's a good reason for the dislike. But you said he scared you?" He tried not to make his tone too questioning—just a lift of the voice.

"Why not?" Holiday tipped back his chair and stared from the window. "Hell, he's been trained to be a walking volume from an encyclopedia—and a *talking* volume. And somewhere in the course of development, he's lost ninety per cent of what made him human, already. Take the insane courage with which he faced the treatment Norstein gave him—I didn't see a quiver of an eyelid before he went under, did you? Only—we've met synthesists before. We know what they're for, we know why they have their character so carefully ironed out, to avoid scraping the raw patch which we specialists already have for them. We can accept this. But when he's through growing, Smith's not just going to be a—a more of a synthesist. He'll be something else. And because he started off a lot less than human, it scares me."

He shoved his hands into the side pockets of his jacket and scowled at Wheelwell as though challenging him to produce a contradiction.

"I noticed his calmness," Wheelwell agreed. "It could've been due to the fact that he had such an encyclopedic knowledge, you know. I mean, there are two reasons for not being scared in face of danger: one is to be too stupid to recognise that it's dangerous, and the other is to be clever enough to determine the limits within which it is dangerous. Only—"

"Only what?" prompted Holiday. Wheelwell gave a nervous laugh.

"Your choice of words, when you said Smith wasn't going to be more of a synthesist. I'd already thought, looking at the experimental animals, that they didn't seem to have got to be more monkey or more cat."

"Just something altogether different," agreed Holiday. He gave a diffident smile. "What does Norstein think of all this?"

Norstein opened the door of the office at that instant and threw a pile of papers on Wheelwell's desk before sitting down—or rather, throwing himself down in a chair. "Look at it, will you!" he demanded.

Wheelwell obeyed, and then raised his eyes. "I'm afraid some of your codings—" he ventured, and Norstein snorted.

"All right. What it amounts to is this: Smith's IQ as measured by each of those tests is normal—within his usual range of variation. As I said it would be. We had him under the e.e.g. for the last one; I wanted to see if I could find where it was coming from."

"It?"

"The ability to do them simultaneously. Well, we didn't find any extra activity in the regions where we'd expected it. The talent is entirely due to the Holiday Effect—he's using non-spatial neurone connections in his new memory codings. *But*"—and he hunched himself forward to glare around impressively—"we found activity in the organ of Shield. The one that hooks on to the progress of time. Three separate zones of activity. Do I have to tell you what that means?"

Wheelwell glanced at Holiday. "Please," he requested.

"Why, it means that so far as Smith's ego—his I-persona—is concerned, he's not doing these three tests simultaneously. He's doing them *one by one*, as he always has in the past, and consequently getting the same results. *He's* doing them in sequence while we're giving them to him together."

Holiday was looking faint. He said, "Ridiculous!"

"Of course it's ridiculous! And the man doesn't even know he's doing it!"

"Doesn't he notice that the—the environment for each of the three tests includes the other two?" ventured Wheelwell.

"He must do, but he wouldn't question the fact, and I've got no mind at the moment to point it out to him." Norstein was sweating visibly; he wiped his forehead with a handkerchief before going on.

"He's got the one memory, of course, for the three tests; but that's after they're over. While they're in progress, he switches his attention from one to the other *only* at the end of each. In other words—"

"He's got time travel," said Holiday bluntly. "I wish him joy of it."

Norstein was taken aback, and then his face slowly went putty-coloured. "Why, I suppose he has, mentally," he whispered.

Wheelwell felt he was in a fog. He said, "Let's get this straight. He does Test A straight through, goes back and does Test B, and then Test C. How? Does his memory include Test A when he's doing Test B, for instance?"

"Oh yes. He did the calculations first, he told me. He doesn't know how he does it. He probably couldn't explain it to us if he did."

"And this applies generally? Like last night he listened to those guitar records before, or after, he read that book?"

"Why not?" Norstein had not put his handkerchief away; he was torturing it between his fingers. "What's memory, anyway? A perfect memory of an event can be induced by artificially stimulating the brain—sights, sounds, all the sensory information is there in the brain. The way Smith is heading, he soon ought to be able to do this for himself. A memory will present itself to him, and he'll be back in the middle of it. He'll remember that he's remembering. But if he ever forgets that . . ."

"I've got a horrible thought," said Wheelwell. The phrase was literally exact enough; he wished he could have made it stronger. "Reality—we were talking about reality, remember? The first day, with Smith? It suddenly strikes me: take an example, a statuette would be a good one. It's got a reality a monkey would recognise; it's a lump of stone, or wood. It's got another quality a man would notice. It's been deliberately shaped. A Bushman would notice something else, too; owing to its human form, it has magical possibilities. And you and I might see still more—that it was a good likeness, or that it was ugly. What's that a matter of?"

"Memory. Environment. The experience of a Bushman includes statuettes used for ritual magic; ours includes museums and *objets d'art*." Norstein's voice was very cold suddenly. He stopped wringing his handkerchief.

"What's Smith's experience going to include?" asked Holiday.

There was no answer.

For the next few days Wheelwell could not bring himself to go down and call on Smith. The memory of that conversation was too strong for him. At length, however, he braced himself with a repetition of Norstein's off-hand remark—"Superman is still man!"—and went down to the laboratory. He found Norstein there sitting at a table and poring over reports.

"Good God, Norstein!" he said when the other raised his eyes. "You look as if you haven't slept for a week!"

"It's only three nights," Norstein answered hoarsely. "I'm not as bad as I look." He pushed back his chair and made a gesture with his thumb to indicate the door of the presidential suite.

"Know what he's doing now?"

Wheelwell shook his head dumbly.

"He's asleep, reading a volume of Malinowski, watching TV and listening to a Segovia album, practising one of Segovia's transcriptions of Bach, and writing a short article on—on I forgot what. And maybe by this time it's something else, too."

"What?" Wheelwell reviewed what Norstein had said, and came to a conclusion. "For one thing, you can't write and play a guitar simultaneously. You need two hands for the guitar—he hasn't grown an extra arm?" he interrupted himself, half expecting that Norstein might nod.

"Go and take a look, if you like, and come back and tell me how he does it," was Norstein's reply. "I can't stand it any longer. I've been watching. Or trying to watch."

Puzzled, Wheelwell hesitated. "Go ahead," Norstein insisted. "He won't bother you. He doesn't talk much to anybody since the day before yesterday."

He buried his face in his hands and added, as though that was the last word on the subject, "Anyway, he's asleep."

Wheelwell walked forward with the air of a man walking the plank, and thrust open the door into the presidential suite. He blinked. There was something wrong with his eyes, obviously, so he concentrated for a moment on his ears, and identified a commentator on TV reviewing the day's news, the sound of a guitar, which came from the record player, and the sound of another, which didn't. He turned towards the second guitar.

Smith was playing it, with every evidence of careful concentration. How the electric typewriter failed to get in the

way while he listened to the record and watched the TV, Wheelwell could almost make out.

But not quite.

He put his hands over his eyes for a moment ; the sensation of watching Smith was similar to looking at an early three-dimensional film without polaroid glasses on. And a sleepy voice broke into his consciousness.

"Good afternoon, Mr. Wheelwell ! Sorry—have you been waiting long ? I was just taking a nap."

Wheelwell looked up bravely. Smith was holding out his hand to be shaken while he played the guitar and typed his article and . . .

And Wheelwell went blindly out of the room and closed the door.

"What in God's name has happened ?" he whispered. Norstein gave a harsh laugh.

"Why, isn't it obvious ? The fact that he succeeded in doing the tests we gave him simultaneously suggested to him that he might do other things simultaneously. Only he's doing them one at a time. If there's a limit to the number he can manage, he'll be a hell of a synthesist, won't he ? We can give him six degree courses all at once, and he'll pass them with honours."

Wheelwell gave Norstein a suspicious glance. "You'd better take a couple of tranquillisers and get to bed," he advised. "This is getting you down !"

Norstein let the tension seep out of him and sagged on his chair. He nodded. "Wouldn't it get you down ? Sometimes I think I've got it—figured out how the process fits together. Then I realise he's interrupted himself for a moment—he starts doing something else, and usually two more things, and that makes it worse than it was before."

"Does he eat ?"

"Oh yes. Only I've had to stop the canteen waiter from taking his food in. The first time he started on his lunch without stopping typing I had to have the waiter sent down to hospital under sedation. That's the way we're all heading, I guess."

"But—I mean, what is it that one sees when one goes in ? Is it Smith, or several Smiths, or what ?"

Norstein picked up a pencil and began to doodle on the blank margin of a report card. "The nearest I can come to

it is to say that we're seeing the process of construction of Smith's memories. In an hour's time he will have remembered typing for an hour, playing his guitar for an hour, listening to records for an hour, sleeping for an hour, and so on. He's *capable* of remembering all that now! But hell, he has to *do* it before he can remember it. And that's what we see when we look in."

He broke the point of the pencil and threw it aside. "We aren't equipped to understand the process. We can only make vague analogies. And I don't feel inclined to take the treatment with the Holiday Effect just to be able to comprehend Smith's actions. Here's an example which has been fogging me for a good hour. It's like one of those theological problems the medieval schoolmen liked to muck about with.

"As I figure it, when he gets through playing guitar, his fingers are going to be sore. Likewise they'll be tired—more so from all the typing he's done. On the other hand, it doesn't make your fingers tired watching TV or sleeping. Well, are his fingers going to be tired and sore, or not?"

Wheelwell tried to formulate an answer, and gave up.

"You follow me, then," said Norstein after an adequate silence.

"How about today's tests? Did they show anything?"

"I haven't dared run any tests since this phase began. I was too afraid of bringing one Smith out into the lab and— and seeing another stay behind in the lounge." Norstein's tired eyes closed. "Maybe I should have done it and got it over with—I've seen it a thousand times in imagination."

"Well, what are we going to do? Just leave him to get on with it?"

"Maybe there's a limit." Norstein looked for a piece of paper among those in front of him. "I did some calculating. I think the number of non-spatial neurone connections available for this spendthrift acquisition of memories is going to be limited. I think. Assuming that, this phase can't last more than a year or two at its present level. But the level shows signs of increasing. And there's always the forgetting mechanism." He looked at the paper he had found, and then closed his hand on it to crumple it into a ball.

"I think someone should study the characteristics of the space in that room," he remarked presently. "Maybe they're peculiar. I'm inclined to suspect that we'll find nothing;

I mean, despite this fantastic behaviour, Smith is probably still aging at exactly one day per day on the purely physical level. If only it didn't suffice him to sleep once at a time—!"

"Has he got a calendar?"

"No, I don't think so. Why?"

Wheelwell started to say something, and then corrected himself. "Of course—he gets the date off the TV. So that's no good. I was wondering whether the peculiar behaviour he's remembering now would have penetrated if he compared the time elapsed since it started with the number of memories he's had crammed in." Wheelwell frowned. "Surely he *must* realise, sooner or later!"

"Maybe he has done," suggested Norstein. "Maybe he thinks it's an illusion; maybe he ascribes it to the Holiday Effect and doesn't query its physical consequences. He still thinks he's doing one thing at a time, most likely."

"Well, it can't go on . . ." Wheelwell pulled himself back from a train of empty speculation. "I'll get Holiday down to check the characteristics of the space in the lab, if you like. Right away?"

Norstein got up. "Tomorrow will do. And tomorrow we can pluck up enough courage to get him out here in the lab for tests. Maybe"—he brightened—"maybe all of him will come."

Wheelwell brought the incredulous Holiday down with his equipment and assistant at nine the next morning. Norstein met them in the outer lab.

"There's a new development," he said. "I think you're going to be proved right, Wheelwell. I think Smith is unhappy. Something's troubling him—or rather, *one* of him."

"What do you mean?"

"He's been at it all night—reading four books and playing half a dozen records simultaneously." Norstein interrupted himself with a dry chuckle. "I'd give my right arm to know how that one was worked!"

"But—?" pressed Wheelwell.

"But he's also been sitting in the bedroom staring into space. If I'm any judge, that's the 'last' of him at this moment. Probably he's finally come around to the problem of why he can remember co-existent actions. I propose that we ask the one in the bedroom to come out for tests; that way we stand the best chance of identifying his latest persona.

And while we're doing that, if you can stand the strain, Holiday, we'll ask you to run checks on the condition of the space in the outer lab and the lounge."

Holiday's assistant looked puzzled and said nothing. Holiday himself gave a curt nod and licked his lips.

They exchanged glances and lined up in order automatically, Norstein at the head, followed by Holiday and then Wheelwell. Norstein open the door into the lounge.

Smith was intently reading an article in the *Encyclopedia Britannica* ; he was replacing a broken string on his guitar and looking for a more interesting programme on TV ; he was writing something on his typewriter, searching through the pile of records and intently listening to some Bach, and one or two other things that Wheelwell tried to ignore. They waited as Norstein walked into the bedroom beyond followed by Smith's astonished gaze. One of it.

Norstein turned back and swore under his breath. "No one in there," he said. He squinted painfully as he surveyed Smith. "Uh—Smith, which of you spent the night in there thinking?"

In the middle of reading the article in the *Encyclopedia*, of replacing the broken string, of changing TV stations, of typing a sentence, of turning over the records, of beating time to a phrase—and more—Smith's expression became very unhappy. For a timeless instant, Wheelwell had the impression that there was only one of him, although his eyes confirmed that he was actually in several different places.

Only he wasn't.

They spent twenty frantic minutes establishing beyond doubt that he hadn't been seen to leave the Foundation premises—any more than he had been seen to leave the room where they were. Holiday's lab assistant threatened to break down in giggling hysterics ; he shuttled her off upstairs, came back and made a determined bee-line for the liquor cabinet. The others copied his example, and it was not until they had felt the artificial comfort of the alcohol that Holiday glared belligerently at Norstein and demanded, "Well? What happened?"

"I don't know," said Norstein. "I can only guess."

"Well, guess ahead," said Wheelwell, closing his eyes and shaking his head. "Where is Smith?"

"About twenty or twenty-five minutes ago," said Norstein with owlish solemnity.

Wheelwell was about to say that that was no answer, when he realised that Holiday was nodding as though he completely understood. He held his tongue impatiently.

"Yes!" said the physicist. "I see what you mean. But—but hell! The conservation of energy! I mean, it can't just *stop*! Where did it go?"

Norstein pondered. "I'm no physicist, but I'll guess with enthusiasm. Where your milli-volt currents go when you demonstrate your effect."

"But they come back! If they *go* anywhere, which seems to me an anthropocentric way of putting it."

"I'm—a bit lost," ventured Wheelwell. Holiday ignored him.

"Wait a moment. I see where it could have gone. How about those half-dozen records he was playing all at the same time? That must have taken energy to—to distort the local space. Yes, that fits. Poor devil!"

"*What happened to Smith?*" Wheelwell only realised he had shouted when the other two stared at him. He repeated the question in a lower tone. Norstein emptied his glass and put it down with an expression of nausea.

"If what I think happened, did," he said after a moment of silence, "then we deserve to have our throats cut. Only—it was unpredictable until it was too late . . .

"I imagine that some time last night Smith finally began to consider the physical impossibility of what he clearly remembered doing. I imagine that at first he would have tried to find some sort of defensive armour in assuming that it was all illusion. By this morning, he had quite possibly adjusted to this idea. But when I asked him *which* of him had spent the night worrying . . .

"You see, all the Smiths were one Smith; each and all of him remembered that night spent in cogitation, because it was in his common past. And—he lost the way forward."

"How do you mean?"

"Up till then, I suppose, he had managed to keep the relative order of his co-existent experiences straight. But at *any* given instant he remembered an instant before in which he had been doing half a dozen or more distinct things. Do you see? He lost the way out, because he couldn't accept that my remark applied to any *one* of him, and equally he couldn't

accept that there was *more* than one of him. Because there wasn't. And I was a fool."

"But he can't just have stopped!"

"In a four-dimensional continuum," said Holiday reflectively, "these non-spatial neurone connections of his, as you insist on calling them, would have served both to connect and store memory-codes in the present, and to provide a method of connecting them past-to-future. This accounts for his contemporaneous personalities; it also provided a source of energy for the physical realisation of his acts. In other words the energy which ought to be sustaining Smith-here-and-now—in the shape of electrons, protons, neutrons, heat, and the rest—has been dissipated. Spent. Back there."

Wheelwell got to his feet violently. "You can't just sit there and talk about him as though he was a—a laboratory specimen! He was a human being!"

"Was," said Norstein glacially. "If you can think of anything we can do about it, let us know."

Wheelwell turned slowly round in the middle of the room, seeing the guitar, the records, the books, the typewriter. Somewhere at the back of his mind, a small voice was posing a question.

What's different from a man, and everything else that ever was?

The other two stood up and set their glasses on the liquor cabinet. They glanced at him, and then at each other, and went out.

John Brunner

Easter Convention—London

The Sandringham Hotel, 25/26 Lancaster Gate, London, W.2 will be the scene of Britain's Easter Convention on April 15th to 17th, sponsored by the British Science Fiction Association. Joint Guests of Honour will be John Carnell, editor of *New Worlds Science Fiction* and Don Ford of Ohio, USA, winner of this year's TAFF trip across the Atlantic.

The Convention fee is 10/- for non-BSFA members and 7/6 for members, covering all three days. Conventioneers wishing to book accommodation at the Sandringham Hotel should write to Miss Ella Parker, 151 Canterbury Road, West Kilburn, London, NW 6—*no bookings are being accepted direct by the hotel*—who can also supply further Convention details.

War is a pitiless thing, demanding more than mere devotion to duty for the active participants. A dedication, perhaps. In space-warfare even dedication may not be sufficient—it may need the deep psychological urge apparently inherent in every Earthman.

MAN OF WAR

by E. C. TUBB

The torp which smashed the control room did more than cripple the ship. It converted Captain Seng into ash, decimated the crew and gave the rest of us an uneasy ten-day gamble with death before we could reach Morgans' World for repairs and replacements.

You know how it is in a war, everything seems to get mixed to hell and replacements come from all over. So far we'd been lucky, getting home-world personnel whenever we needed them, but the grape-vine had it that things were beginning to come apart at the seams. Home-world replacements could no longer be guaranteed and too many ships were going into battle with mixed crews.

Our luck didn't hold out this time. We managed the crew but missed out on the captain.

"He's from Earth." Second Officer Lee joined me where I stood outside the ship. He'd just come from the tower, the inevitable sheaf of papers in his hand, an odd expression on his face. "A real, keen bright boy fresh from training school."

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"From Earth?" I was surprised. Terrestrials usually stuck together closer than a weld. They ran the war, of course, but ships usually had home-world commanders. "How come?"

"A new directive from Central Bureau." Lee sounded disgusted. "Seems that all Fed auxiliaries are to have Terrestrial commanders in future; said commanders to take over as and when the opportunity arises."

"Such as Seng getting his." I looked towards the tower. A figure marched towards us, very tall, very neat, very upright. Even at this distance he looked very young. Our new captain, no doubt. I had about five minutes to get used to the idea.

His name was Brant, Captain Carl Brant, he insisted on the title.

"First Officer Prin," he rapped, "you will please remember that I am the captain of this vessel. You will see to it that I am addressed as such."

"Okay, Carl." I gave him a smile. "No need to to be so formal about it."

He looked at me. He had a pink face and blue eyes. Beneath his uniform cap his dark hair was so closely cropped as to reveal the skull. He smelt of soap and after-shave lotions, his uniform was a tailor's masterpiece. He was painfully correct, painfully precise, painfully the exact picture of what a model captain should be—to anyone who had never served beneath a model captain.

"I shall not repeat myself, First Officer Prin." His voice matched the coldness of his eyes. "Any familiarity will be considered insubordination and treated as such." He drew in his breath. "Do you understand?"

"Sure, Car—Cap—sir." I almost choked over the word. What the hell difference did it make what you called a man as long as you were willing to die with him?

"Are you quite sure, First Officer Prin?"

"Yes, sir." I knew what he wanted now. Repetition didn't make it any easier. "I understand."

"I hope that you do." He looked hard at me, then at Lee. "See to it that the others do also."

I heard Lee say something under his breath but I didn't catch exactly what.

We began the tour of inspection.

Brant wasn't impressed. The *Wentar*, like most Federation auxiliaries, was a converted cargo vessel with all that implied. She'd been fitted with a more powerful Banner engine, the control room had a hash of extra instruments, a gunnery room had been built with a complex mass of plotting and tracing gear, but she had none of the smooth, relentless beauty of a ship designed and built for war.

Her crew, like the vessel, had also been converted. Basically they were civilians pressed into uniform and they looked it. They acted it too, much to Brant's disgust. What he didn't give them credit for was their efficiency.

I halted by a bulkhead liberally dotted with stars.

"Our record to date. Twenty-eight enemy vessels destroyed."

"On how many missions?"

"Thirty-seven." I remembered something. "Sir."

"I see." He stared at the bulkhead. "Your record would be more to the point had you troubled to signify the types of ships destroyed."

"Does it make any difference?" Lee was bitter. "There isn't a ship so small that it can't mount a torp-tube."

"You forget yourself, Second Officer Lee."

"Do I?" Lee swallowed, he was thinking of our late near-miss and the single-man enemy scouter which had caused it. "Perhaps I do—sir."

"That's better." Brant was more pleased with the use of the title than he was with the record of the ship he now commanded. "Shall we continue?"

He didn't say much during the rest of the tour, not in actual words, that is, but he left us in no doubt as to how he felt. Later, in the control room, he put us through the hoop.

"This ship," he said coldly, "is a disgrace."

"Now wait a minute—" Lee wanted to say more but he wasn't given the chance.

"I was warned what to expect," continued Brant, ignoring the interruption, "so I cannot say that I am unduly surprised. Disappointed, perhaps, but not surprised." He looked at me. "You were about to say, First Officer?"

What I wanted to say would have put me in deep trouble. Squirt or not Brant was the captain with all that implied. I found refuge in generalities.

"The *Wentar* may not be a perfect ship, Captain, but it is an efficient one. Our record proves that."

"Perhaps. But had the ship been truly efficient your score would have stood higher. I am not forgetting those nine wasted missions, First Officer Prin."

"Wasted, Captain?" Lee couldn't control himself. "May I remind you that if it hadn't been for our last 'wasted' mission you would not be in command?"

"And that is the thing which really upsets you, isn't it?" Brant looked from Lee to me and then back to Lee again. "I am not of your world and you object to that fact. Why?"

It staggered me that he should ask the question. All through the war ships had been crewed by one-world personnel, until lately, that is. A man fights better with his own, has a closer affinity, feels more at ease. Ships from Ligur had Ligurian crews, ships from Orestis the same. I came from Ormond, so did Lee, so had Seng and every captain before him. Those captains understood our ways, knew how we felt, knew how to get the best of us. A dozen reasons told against assorted crews—religion, customs, lack of something common to discuss, even the spices used in cooking.

The Federation recognised that fact, had recognised it, that is. Now, for some reason, they were ignoring it. Brant told us why.

"Every empire had this problem," he explained coldly. "Provincials, no matter how loyal they are supposed to be, cannot have the same interests at heart as the Mother World. They only grasp a part of the pattern, not the whole. I may as well tell you this now; the war is going against us. The reason is to be found in the auxiliaries."

That was going too far. Both Lee and I protested. Violently. Brant cut us short.

"What you think is of no importance," he said evenly. "Central Bureau has studied the problem and arrived at the answer. From now all auxiliaries will be commanded by Terrestrials. Law discipline will be tightened, morale improved, the major aims of the war kept in mind."

"In other words," I said bitterly, "you don't trust us. Is that it?"

"If you were not trusted you would not be on my ship," said Brant. "I think that you have been allowed to slip into lax ways. That, obviously, was the fault of your previous commander. It is a fault that I shall remedy."

"Captain Seng was a good man," said Lee. "One of the best."

"Perhaps."

"No 'perhaps' about it." Lee was in a temper. "He was a damn fine—"

"Silence!" Brant stared at us, spots of colour flaming on his cheeks. "This insubordination must cease! I must remind you gentlemen that this is a ship of war. An auxilliary of the Earth Federation. You will conduct yourselves accordingly." He stared at us as if expecting defiance. "First Officer Prin?"

"I understand, sir."

"Second Officer Lee?"

"Sure," said Lee. He met Brant's eyes. "I mean, I understand—sir."

"Good." Brant relaxed. "That will be all, gentlemen, you may return to your duties. We leave at dawn."

Outside the control room Lee wiped sweat from his face and looked at me.

"The bastard," he said. "Oh, the sweet, unloveable bastard!"

A ship is like a family, everyone has an interest in everyone else. If a man gets toothache then the rest will see to it that he gets it fixed—they can't tolerate his noise and misery. If a man has an unhappy love affair then the rest will cheer him up. If a man gets the wrong ideas then the others will cut him back to size. It's a simple matter of survival. When a dozen men live in a small area they have to live together—or they don't live.

That's the basic reason for one-world crews. The captain is more than just the man who gives the orders, he's the confidante and confessor of the crew as well. And, coming from the same planet as we did, meant we trusted him to take care of us if for no other reason than he'd have to answer to our kin if he didn't.

Brant was a stranger with a stranger's ways. I wondered what Central Bureau—Earth, was trying to do. The Federation had expanded by means of conquest and colonisation, all of us had our hereditary ties with the Mother World and so far no one had questioned those ties. Not even when war had been declared against the Ilithen, the odd, lizard-like race we'd bumped into and whom we had been fighting for the past seven years, had anyone objected. Earth was at war, that

had been good enough for us. We'd pitched in and hadn't argued. But now—

"I don't like it." Lee had joined me in my cabin. We were two days out with nothing to do. The Banner engines had pushed us into hyper-space and we didn't really exist until we emerged back into the normal continuum.

"What don't you like?" I was off watch, supposed to be asleep. "Brant?"

"Who else?" Lee sat and fumed to himself for a while. "You ever been to Earth, Prin?"

"No. You?"

"No, but I've met those who have." He shook his head. "Crazy sort of planet."

I leaned back and waited. Lee had something on his mind and it would come out in its own, good time. Finally it came out.

"I'm scared, Prin," he admitted. "I've heard all about these bright boys fresh from the training schools. I've heard about their training too." He looked at me, I still waited.

"Seng wasn't so bad," he burst out. "Brant's different, he's not one of us and doesn't give a damn for anyone but himself. All he wants is to build up a record so that he can prove himself."

"That's natural. Every young commander's the same."

"Maybe, but the crew aren't too happy at the way he treats them. All this 'sir' business. Hell, Seng never expected it and they don't like giving it. It," he waved a hand, "it sort of puts up a barrier between us, makes us feel inferior."

That I could agree with. On Ormond we didn't go in for titles and lip-service. We didn't go in for unnecessary spit and polish either, what did it matter if a handrail was painted or polished bright? It was still a handrail. During the past couple of days Brant had had the crew working for the sake of it. Still, all that would be forgotten when we entered battle. I said so. Lee pursed his lips.

"That's what I'm scared of," he said. "I don't mind taking a chance, we've done it often enough, but I like to think that the captain is thinking of my neck a little more than his record. Seng did. Will Brant?"

"It's his neck too," I pointed out. "You think he wants to get himself killed?"

"From what I've heard, his type don't give a damn about that. They're all heroes, every one of them. All they care about is medals—and they don't mind if they're posthumous at that."

"Now you're talking stupid. Brant's young and eager, sure, and he's from Earth which makes a difference. He's got tradition behind him and a way of doing things and he's eager to make his mark. Well, what's so wrong about that?"

"Trying to defend him, Prin?"

"No, but I'm not going to damn him either. Let's give him his chance. Seng's dead, forget Seng. Brant's the captain now, like it or not. It's a fact we've got to live with. Let's start living."

"Or dying," said Lee sombrely. "That's what I'm afraid of."

Ten days later we flipped from hyper-space and readied for action. Intelligence had reported enemy activity in this area and our job was to knock out any Ilithien ship we spotted. So much I learned from Brant and relayed the information to the crew. Brant didn't seem to think they would be interested.

Not that it was new to them, we'd done the same thing often enough before, but none of us liked it. There was too much waiting, too little action, too much time hanging too heavily on our hands. We'd emerge close to where the enemy were expected and hope that we could spot them before they spotted us. If we were lucky we'd hit them before their own missiles could reach us—or rather reach the spot where we had been. It was wait, fire, run in that order.

This time we didn't have to wait too long and I was glad of it. We had automatic scanners, of course, and mechanical aiming gear but that was about all. Theoretically we didn't need a crew but the ship wasn't designed for self-operation. Also there was the small but important matter of identification. We didn't want to shoot our own vessels out of space.

"Something at ninety-seven ; fifty-two." The voice from the gunnery room echoed from the speakers. Simultaneously a green fleck glowed on the control room screen.

"Prime tubes !" I glanced at the radio operator. He'd flashed the FF signal. If they didn't answer correctly we'd fire.

"Wait !" Brant stared at two more flecks on the screen. The sight did things to my stomach. I didn't wait for Brant.

"Fire !"

I felt rather than heard the hiss and thud of the launching tubes as they spat their missiles. The next thing was to get out of here. With three ships shooting at us we were as good as dead if we didn't. Brant thought so too. He hit the switch, the Banner's pushed us into hyper-space—then he hit the switch again.

"Aim and fire at will!"

I was groggy from the sudden thrust in and out of hyper-space. On the screen the enemy vessels showed actual contours, so close had we come. It could have been imagination but I could have sworn I saw the flashes from their launching tubes.

"Brant! For God's sake!"

The deck vibrated beneath my feet. One of the enemy vessels suddenly dissolved into an expanding mist, our original target probably, then Brant hit the switch again—too late.

Torp missiles aren't big but they pack plenty of power. Something jerked the deck from beneath my feet, lifted it, slapped it into my face. A giant yelled from somewhere in the ship and a gush of heat blasted from the ventilators. Then the roar faded, signal lights flashed on the panels and, aside from a man screaming, the ship was silent. Then even the screaming died.

Our damage was three men killed, two compartments devastated and half our supplies ruined. It could have been worse. One of the enemy torps which had hit us turned out to be a dud. It was a miracle which saved us from complete destruction.

Brant wasn't upset.

"A fair exchange," he said, as we limped home for repairs.

"Three men dead, three enemy ships destroyed."

"We could have all been killed," I reminded. He shrugged.

"You expect to take risks in war."

"Chances, yes. Suicide, no."

"Indeed?" He stared at me almost as if I were an interesting specimen. "Tell me, First Officer Prin, how would you have conducted that engagement?"

I told him, he looked disgusted.

"I can understand now why the auxiliaries are letting us down so badly. You would have fired one burst then hidden in hyper-space. Didn't it ever occur to you that it was worth trying for all three of the enemy, even at the cost of this vessel?"

"No." I expanded the bald negative. "The odds were too high. It's better to hit and run so that you can hit again. After all, we only have one life."

"And that is important to you?"

"Very important." He cut me short before I could elaborate.

"Important, perhaps, to you no doubt. But not to the Federation. You, I, this ship, all are expendable." He sighed. "It appears that that is something else I shall have to teach you."

It wasn't until Brant joined us that I realised how far we had grown from Earth. Our first engagement emphasised the difference between us and every following engagement made it worse. He was, as Lee pointed out, hardly human.

"How can he be?" he insisted. "Look at the chances he takes, would a normal man take such risks?"

"He might." I was still trying to be fair. "Back home, say, if a fire threatened to wipe out your farm, you'd take risks then."

"Sure, I helped build that place, my kin live there. But that's different."

"Not to Brant, it isn't. He's a Terrestrial, remember, Earth is at war."

"Well, so are we."

He had me there. The Federation was in this war as a unit, we should have all felt the same about it. Up until now I thought we all had done. But obviously we didn't. Brant, now, he didn't feel the same as Lee did or as I did for that matter. He seemed to be dedicated to destroying the enemy holding his own life, in comparison, as less than nothing. The trouble was he held our lives in exactly the same way.

"It's the training," said Lee. "They take a young guy and they do things to him and turn him out like Brant. In a war that might be okay, but what about after? What good will he be then?" He frowned in thought. "You know something, Prin."

"What?"

"I figure that Earth knows what Brant is like, all the Brants. That's why they've given them command of the auxillaries. What does Earth care if he kills us all—just so long as he takes a few of the enemy with him."

I didn't like the line the talk was taking and said so. Lee shrugged.

"Let's face it, Prin. What does Earth care about us? Really care, I mean? We supply ships, but all the good ones get commandeered. We provide crews and get Terrestrials put in command. All Earth cares about is beating the Ilithen and it seems as if any way is good enough." He scowled at the bulkhead. "Seven years now. When's it going to end?"

"When we've beaten the Ilithen."

"You think so? And what then? More expansion, another alien race, more war with us as the fall guys?" He leaned towards me. "Don't you ever feel as if you want to go home? Don't you ever get the feeling that Brant is pushing his luck a little too far?"

"Maybe he can't help himself." Some perversity made me defend Brant, deep down I felt just as Lee did.

"Maybe he can't, that's the trouble, that's what I'm worried about. I tell you, Prin, Brant's leading us straight to hell and he won't rest until he's got us there. You'll see."

The duty bell chimed then and I had to join Brant in control. He was, as usual, busy with his papers though what the hell he found to do after twenty days in hyper-space I couldn't guess. Seng would have cleared his desk on the first day out and spent the rest of the time yarning or playing cards with the crew. Thinking of Seng made me pay attention to Brant.

Outwardly he was the same as we were, a little more precise, a little more distant, but we all came from the same stock. Physically there was no difference, mentally was something else.

We had no contact. He was the captain and we were the crew and it ended there. There was no affinity, no common weaknesses, no mutual understanding. Brant had come to us a stranger and he had remained a stranger. He was from Earth and we were from Ormond. He had thousands of years of tradition behind him; we had a few generations. Looking at him I felt that I was looking at an alien.

He felt my eyes and lifted his head.

"Something wrong, First Officer Prin?"

"No, sir." Seng would have put it differently and received a different answer. You can talk to a friend, how can you talk to a stranger?

"I had the impression there was," he said quietly. "You are free to tell me anything you wish."

What could I say ? Could I tell him that we were afraid of his taking us to our deaths ? It was true enough but not the whole truth. We didn't want to get killed but that didn't mean we weren't willing to take chances. We just didn't want to throw our lives away.

Could I tell him that we were sick of the war ? After seven years of it that must have been obvious, even to him. Could I tell him that we begrudged him his command ? That we didn't trust him to consider our welfare ? Could I tell him that he was disliked because he was not one of our own ? What could I say ?

"Well, First Officer Prin ?"

"Nothing, sir."

"I see." He sat, head tilted, staring at me with those blue eyes. After a long moment he sighed. "Very good, First Officer. Take over watch now. We emerge in seven hours, call me in five, I will brief you then."

It was a long five hours.

We'd never been briefed before. With Seng it hadn't been necessary, we all knew the routine, and until now Brant hadn't bothered. Perhaps crews on Terrestrial ships were left in ignorance or perhaps he'd figured that we'd be happier left that way. Certainly had we known what was in store for us on some of his missions we'd have kicked. As Lee did now.

"It's crazy," he said flatly. "It's worse than that, it's suicide."

Brant didn't answer. Instead he looked at Lee then at me. His briefing included only us two.

"Well, First Officer Prin ?"

I agreed with Lee, I had to, but I didn't say that.

"I can't see how it can be done, sir. Or why it has to be done."

"It has to be done," Brant said evenly. And he told us why.

The Ilithen were alien and because of that it was physically impossible for agents to be planted among them. Instead Intelligence had devised a means of snap-observations ; tiny spotter ships would flash out of hyper-space, see and record what they could, then escape while they had the chance. Their information was fed into the giant computers at Central bureau and the running of the war was based on their predictions.

The enemy operated in exactly the same way. It was a peculiar situation of feint, bluff, and attack with the game going to the side with the most efficient spotters and computers. A game in which time was the vital factor.

Radio didn't operate in hyper-space. Couriers were used instead. The quicker relevant information could be carried to a computer the better—and the Ilithen had a master-computer almost on our doorstep.

We had to destroy it.

Put that way it sounded easy but we all knew it was far from that.

"They'll have that thing ringed with ships!" Lee's voice rose as he thought of it. "Static forts, the works! We'll be wiped out within seconds."

"The installation is new," said Brant mildly. "No static forts as yet. A few ships, of course, but that is to be expected." He rested his hand on the orders which had sent us on this crazy mission. "The computer is mobile, assembled in space from components which were dropped in orbit. Secrecy was their only defence and they knew it. That means no heavy concentration of ships at that point."

"But we know," I pointed out. "They must know that we know. Anyway, it's only logical that they would rush protection there as soon as they could."

"Of course, that's why we have to attack without delay."

I wondered at his calmness. To me the operation called for a full fleet, not a single converted cargo auxilliary. All right, so we happened to be the closest, we could get there the fastest, but we were still a single ship. The enemy would be waiting for us with all the advantage.

I saw Lee glance at his watch and knew what he was thinking. In an hour now, even less, we would all be dead. Unless . . .

"This installation has to be destroyed," said Brant quietly. "You understand that there can be no question as to that."

"Why? So that you can get a medal?" Lee's voice was high with strain.

"So that we can stop the war ending the way it must not end—with us defeated."

"Us?" Lee snorted. "Earth you mean, don't you?"

"Is there any difference?" Brant spoke very quietly.

"Aren't we all of the same race, the same family? Isn't it important that we remain as we are, not as another race would

want us to be? Oh, I know that you consider that I am different to you and have resented me because of that, but is the difference so great? Would you be happier if the Ilithen ruled Ormond?"

"Would it make any difference?" Lee glanced at his watch again. I avoided his eyes.

"Perhaps not," said Brant. He sounded weary. "But we have no time for philosophy. Let's get on with what we have to do."

He told us the rest of his plan, the one, single chance of doing what he had been ordered to do. When he finished I felt sick inside.

Lee was right.

It was a suicide mission.

The last few minutes are always the longest. Alone in the control room I had plenty of time for thought. Brant's plan was insane but, because of that, it might conceivably work. I wondered if he would have used the same plan had his ship been crewed with Terrestrials. Perhaps, perhaps not, if they were all like him then they were a crazy bunch. I turned as Lee entered the compartment.

"Is he ready?"

He nodded. His eyes were furtive, almost ashamed.

"You know, Prin," he said abruptly. "He doesn't have to do this. We needn't let him."

"No." I knew what he was thinking. The crew could refuse the mission, take over the ship, go back home and forget the war. I'd thought of it myself. Thought of it often when the going was hard and death waited only a whisper distant. It was a tempting thought but not a good one. Mutiny can never be justified.

"I don't like it." Lee moved restlessly about the control room. "I don't like it at all." He wasn't talking of the mission.

Brant joined us then. He was wearing full space armour, his shoulders bowed with the weight of the propulsion unit. His face, rimmed by the open face-plate, was very pale. He shuffled towards us, his body hampered by the tight suit. He glanced at the instruments, checked his suit chronometer by the one on the panel, adjusted the pouched belt at his waist.

"You are clear as to what you have to do, First Officer Prin?" His voice was like that of a robot, utterly devoid of emotion.

"I understand, sir." For the first time the title came easy.

"The timing will be very important." He hesitated a little. "The success of the mission will depend on how you operate the ship. I know that you will do your best."

"You can rely on me, sir." I met the stare of his blue eyes. There was a lot I would have liked to say but the words stuck in my throat. Anyway, it was too late for words.

"Second Officer Lee will attend me," he said. "He will rejoin you at the earliest moment."

"Yes, sir." There was strain between us, a mounting tension, a feeling of unreality. I noticed his gloved hand rising towards me.

"Goodbye, First Officer Prin."

"Goodbye, sir—and good luck !"

I saluted as he turned away.

Lee went with him, down to the mid air-lock, down to the little coffin of steel with the double doors. He would wait in there together with his package of atomic disruption, helpless and alone as I took over his command, waiting as the minutes ticked away to the time when the outer door would open.

I wondered what he would be thinking during that time of waiting.

Would he pray ?

Would he think of the home and the friends he would never again see ?

Would he have regrets ?

Somehow I didn't think he would. Earth expected allegiance from the Federation and received it. But from her own children she not only demanded allegiance but utter obedience. Demanded it and received it in a manner I was only now beginning to understand.

No wonder Brant had seemed such a stranger.

For the first time I realised just how lonely he must have been.

Lee joined me and together we watched the instruments. He was very quiet, very subdued, his thoughts, like mine, were confined within metal walls. Then a light flashed on the panel and it was time to stop thinking.

We had a chance. A slender one but a chance just the same. Brant had given it to us at a cost I didn't like to think about. It must not be wasted.

The light flashed again and switches moved beneath my hand. The shuddering whine of emergence filled the ship and stars glowed on the screens.

"Take a fix on designation," I snapped. It was an unnecessary order, the crew knew what to do.

It was an old trick this taking a pin-point sight and emerging smack on the target. Old and dangerous because the closer we came the quicker their torpedoes would reach us. The advantage always rested with the ships in normal space. There was a fraction of time when a ship emerged during which it was a blind, helpless thing. Senses took time to re-orient themselves, instruments time to scan and be read.

It was like a man jumping out of water ; he needed to wipe his eyes before he could see. During that time a waiting ship would have us spotted and missiles on the way. And the closer we were the easier we would be to knock out of space.

"Ready !" Beads of sweat made tiny rivers on my forehead, stinging my eyes. A signal light flashed and again we shuddered to emergence. Then the hiss and thud of the launching tubes shook the ship, a door swung open and a tiny figure flung itself into space.

We were hit twice before we could escape. The acrid stench of burning flesh followed the roar of the explosions. Sanity demanded that we stay where we were, safe in hyper-space, but at that moment I wasn't sane.

"Get ready !" I yelled. "Here we go !"

Again the shudder, the hiss and thud, the tension of gambling with death. This time we made it without loss but still I wasn't satisfied. Brant needed cover, he was going to get it.

He was out there, alone in space, gliding towards the big computer installation which I had seen ringed with guarding vessels. He carried a bomb which could smash the hull and disrupt the delicate electronic cells by a blast of radiation. His job was simply to reach the installation, fasten the bomb—and die in the explosion.

Unless he died first.

There was always the chance of that but, as he had pointed out, it was a slender one. Space would be full of our missiles, the enemy gunners concentrating on our ship, their interception torps aimed for the fast-moving destroyers. A tiny, slow-moving object would hardly be noticed on their screens. With

space full of blasted debris one tiny fleck among so many would be ignored.

That was Brant's plan and it was a good one. If one of our missiles, or theirs, didn't hit him. If he escaped the shrapnel from the exploding interceptors. If we could keep them so busy they would have no time for suspicion.

"Stand by for firing!" I flung the ship into normal space again, the tubes spitting their torps, not waiting for a correct aim, intent only on filling space with interference. We were distant this time which gave us a fraction longer to see what was happening. We'd been lucky, one of their ships was a glowing cloud.

Then we got hit again and ran for safety.

The enemy torp had landed near the control room. I'd been flung over the panel, only luck and instinct had made me grab the right switches, and air was hissing from our ruptured hull. Lee, his face covered with blood, listened to damage reports.

"Five dead, two badly wounded, one burned but still operative. Four compartments wrecked and half our launching tubes."

"Repair hull." I wiped my own face. My nose felt as if it had been knocked out of place, probably broken but I felt no pain. "How many torps have we left?"

"Enough for another salvo." Lee grabbed my arm. "Prin! Again?"

"Why not?" I looked at him. I must have been crazy but, if I was, it was catching. "Let's go!"

God must look after fools. By all logic and common sense we should have been punished for pushing our luck too far. We jerked out right in the middle of them, shot off our torps and ducked away without damage. It was the sort of thing Brant would have done, maybe we had caught our madness from him.

But we had our reward.

It was only a glimpse but it was enough. The installation had a hole in its side and a fountain of burning gas spouted from it like a jet of luminescent mist. Brant? Probably we would never know for certain. It could have been him or it could have been a lucky hit from one of our torps but, guessing how that thing would have been guarded, I felt it was Brant.

I wanted it to be Brant.

We were busy on the way home but not too busy for thought. I was busier than the rest for I had the responsibility of command. That responsibility opened my eyes. I had thought that Seng was the best captain we could have had but I was wrong. He had been a wonderful friend, a good companion, but he was no good to command in war.

War needed something extra from a man. What it was I was beginning to learn. Dedication, perhaps? That and something more. A refusal to be beaten, a total disregard for anything but doing what had to be done, a ruthless drive which nothing could stop.

Brant had had it but he was only a child of his environment. It was an attribute of Earth. It was what had driven them onward and outward. It was responsible for Ormond and all the other worlds of the Federation. It was the thing which would beat the Ilithen no matter how long it took.

We limped home and landed and I went with Lee to report to the tower. The local commodore was from Ormond, he made sympathetic noises when he heard our story.

"Tough," he said. "Captain dead, ship wrecked," he shook his head. "You'll have to be used for replacements to other ships." He winked. "Still a few of the boys holding onto their commands, I guess you'd prefer to serve under one of your own."

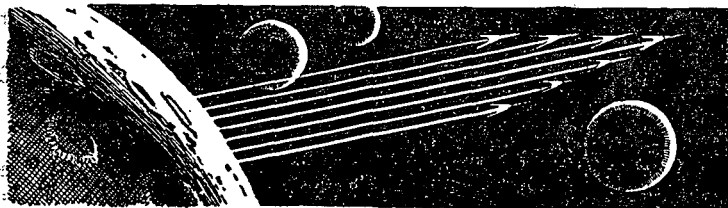
"No."

"How come?" He looked pained. "I figured on doing you chaps a favour."

I told him what he could do with it and I told him what I wanted. A Terrestrial captain or nothing.

It was time I learned how to fight.

E. C. Tubb



Once again, Hendrix, boss of the Commission for Spatial Projects and Colonial Exploration, hands trouble-shooter Johnny Dawson a difficult alien problem to solve. Unfortunately, the solution can only produce an even greater problem.

THE JARNOS AFFAIR

by LAN WRIGHT

"What," enquired Hendrix, "do you know about Jarnos?"

Johnny Dawson considered the question and the angle of the big, black cigar in Hendrix mouth for several long seconds. Finally he said, "Nothing boss."

The cigar dipped as Hendrix scowled slightly. "That's what I like about you, Dawson. You're so honest, so straightforward—so ignorant."

"Oh, I wouldn't say that." Dawson smiled with self-effacing modesty and waited for Hendrix to elucidate the matter.

"Well, I would. Jarnos is where you're going, and it wouldn't be a bad idea if a SPACE Commission agent knew something about the planet he's visiting."

"You have a point there," admitted Dawson.

"And stop agreeing with me," Hendrix scowled. "This problem—"

"What problem?"

The cigar depressed a few more degrees, and the black brows beetled slightly over the gimlet black eyes.

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"Johnny," said Hendrix patiently, "I had a hard day yesterday, and I worked late last night, and I was up early this morning, and I don't like stupid questions from someone who ought to know better." His voice rose steadily throughout the monologue, and after a pause it dropped to a threatening whisper as Hendrix said, "The problem on Jarnos."

Dawson said, "Oh !" and decided this wasn't the time to pursue the subject.

"Jarnos is a rim world," explained Hendrix, "and it was found by one of our exploration ships three years ago."

"No wonder I never heard of it," put in Dawson.

"Shut up." Hendrix colour went a deeper shade of red. "You can get any detail you want from the Commission's records before you leave. I'm just giving you a brief outline. Now, the planet has a humanoid race of oxygen breathers, who have developed a society of early atomic feudalism. We've got a survey ship out there carrying out the usual five-year preliminary investigation. Since we discovered it the Commission has obtained a franchise agreement from the Central Galactic Council which places Jarnos within our sphere of economic control. We can help the Jarnosians to improve the structure of their civilisation—"

"In return for nice fat trade and mineral concessions," added Dawson.

"—after the five years survey is through," said Hendrix, turning slightly purple. "In the meantime we are responsible for these people. You might say we are guardians of their future, helping them along the road to a better life."

"You might say that," Dawson agreed innocently.

"Don't you get smart with me," snapped Hendrix. "Jarnos is your pigeon, Dawson, and we want action—fast. There's a scout laid on for a midnight departure, and we'll provide hypno tapes for the language and full records of current information and data on the planet. It won't be much but it will give you a grounding that can be filled in by the survey people when you get there." He rose from behind his desk and waved a hand in vague dismissal. "It's all yours, Johnny, and I know you'll do a good job."

Dawson got up slowly. "There's one small point, boss," he began, cocking an enquiring eye at his superior. "What am I going out there for?"

The cigar rocked angrily as Hendrix leaned across his desk. "If we knew what the trouble was, Dawson," he growled,

"we might not find it necessary to send one of our top agents half across the Galaxy to find out. The head of the survey group reported that he felt it the best course of action to keep whatever it was as quiet as possible to avoid wide-spread complications. Oh, yes. His name is Paul Kodally, and his little problem is all yours. Now, get to hell out of here, and don't ask any more darned fool questions."

Dawson gazed morosely at the red disc of the planet below him. Through the view port of the command ship it wasn't a very prepossessing sight. Most worlds that he'd seen from a similar position had something to commend them, even though each one was, unconsciously, compared with Earth.

Jarnos had nothing.

It was a large, over-ripe plum, with an evil miasma of an atmosphere that Dawson found hard to believe was breathable by Terrans. True, its inhalation was anything but pleasant, but a Terran could live for months, or even years, on Jarnos without suffering permanent damage—providing his olfactory senses weren't in working order.

Dawson scowled and rubbed a hand through his short, blonde hair in a gesture of irritation. Like most jobs that he'd ever had with the Commission this one smelled to high heaven, and it had the added attraction—if that was the right word—of being so smelly that the chief of the survey group felt it necessary to keep the matter secret even from his superiors on Earth. And that point alone gave Dawson an unpleasantly psychic itch.

The cabin door slid open and broke Dawson's train of thought. He sighed and turned to greet the newcomer.

"Mister Dawson? I'm sorry I wasn't around to greet you as soon as you arrived." The man was smaller by a head than Dawson's own six foot; he was thin and wiry, with black hair and an old-fashioned, bushy moustache that Dawson pinned as an effort to impart some personality to his otherwise colourless being. He crossed the cabin with quick, neat steps, and his handshake was firm and eager, as if Dawson was the one and only person he had ever wanted to meet in his whole life.

Dawson smiled. "That's all right. You must be—?"

"Kodally. Paul Kodally. Please, sit down."

Dawson took the proffered chair and wondered how a man with Kodally's obvious lack of presence had ever become head of an investigation team as big as the one here, at Jarnos.

Kodally settled himself fussily behind his desk; placed the tips of his fingers precisely together, and asked, "How much do you know about this business, Mister Dawson?"

Dawson shrugged. "Precisely nothing. Oh, I had a hypno course in the local language en route from Earth, and I've got a sketchy picture of the ethnological set-up—nothing complete you understand."

Kodally nodded and was silent for a moment, clearly marshalling his thoughts.

"First of all," he said after a long minute, "we are in the second year of the preliminary five-year investigation. We have a mandate from the Central Galactic Council under the usual terms and conditions. There must be no exploitation of the native race or races during the investigation, and there must be no giving into their hands any information or knowledge that is beyond their own technology to produce."

Dawson shifted irritably and nodded. "Sure, I know the rules. Is that where your problem lies?"

"You are quick to see our difficulties." Kodally nodded approvingly.

"I don't see anything," Dawson retorted crossly. "All I did was assume that the trouble must lie within the compass of the two laws you just quoted—otherwise there was no reason to quote them."

"Ah, yes. Of course." Dawson noted the first sign of a crack in Kodally's composure, and realised that his first impression of a man who desperately needed artificialities to bolster his self-confidence, was not far from the mark.

"Our problem concerns the second of the laws which I quoted," went on Kodally. "The giving into the hands of the Jarnosians information and knowledge which is, to use a word, contraband."

Dawson sat quiet and digested the information. Of the two laws originally stated by Kodally this was the most serious. Exploitation could be stopped and those responsible punished without a great deal of damage being done. But knowledge, once dispensed, could not be denied. In the hands of a race with unknown potential, knowledge could set the Galaxy alight with a flame that would be hard to extinguish. Four centuries earlier history had written a warning to the future when a wealth-seeking privateer had traded atomic know how for a personal fortune to a new-found race of technical savages. The resultant blowup had cost millions in life and effort to put

down, and had been the direct cause and reason for the introduction of laws to prevent any re-occurrence. The penalties were needfully savage for all who broke them—be it individual or race.

“I don’t need to remind you of the Rhan incident,” remarked Kodally.

“I was just remembering it,” replied Dawson grimly. “You think this could be another like it?”

“I hope not,” Kodally shrugged, “but I can’t help having fears. Let me tell you the whole story. This command ship arrived in orbit just over eighteen months Terran ago. The preliminary work had already been done by the crew of the exploration vessel that discovered Jarnos. The natives were ready to receive us without fear, and we had all been hypnotized on their customs, taboos, language and so forth. In short everything was as it should be.”

“I know the routine,” put in Dawson wearily. “Just get to the problem.”

“Eh? Oh, yes. Well, everything went smoothly for just over a year. The natives were friendly, eager to help us with our work, eager to start small trading schemes. There were no problems.”

“And there,” interposed Dawson, “I smell the first large rat.”

Kodally grinned weakly and admitted it was unusual. Still, he and the rest of the team thanked the stars for their luck and watched with pleasurable surprise as the investigation went on well ahead of the most optimistic schedule.

And then the trouble had begun.

“Six months ago,” said Kodally, “one of our scout vessels made an unscheduled trip to the planet from the command vessel, and one of the crew was carrying out a routine check of the craft’s detection equipment. Its line of flight took it around the planetary curve to the hemisphere on the far side of the command ship’s position.”

“And?”

“As it swung down towards the surface its instruments picked up the track of an atom-powered vessel travelling through the upper atmosphere at some four thousand miles an hour.” Kodally sat back in his chair and stared bleakly at Dawson. “These people are only in the first stages of atomic discovery—they do not have even the most rudimentary of

atomic power stations. Such aircraft as they possess depend on liquid fuel motors of the most primitive design, and yet, out of the blue, they develop a very fair copy of one of our own six-man scout ships. No, Mister Dawson," Kodally shook his head, "I do not believe in miracles."

"What did you do about it?"

"Fortunately, the crew of the scout had the good sense to do nothing. They turned straight round and reported back to the command vessel. We called for a load of long range detection equipment from Earth, and in the meantime carried out such close range observation as we could. In a few weeks we uncovered a score of things that had no right to be on Jarnos, including the skeleton of a giant atom-powered ship that might almost be a duplicate of one of our supply ships. In addition we found hand weapons, defensive screens, detectors—oh, a whole list of things that just shouldn't have been there."

"Someone is feeding them information, you think?"

"You think they can do what they are doing in just three years from our first contact with them?" Kodally asked.

"Well, I kept tabs on our own staff—against my better judgment—but nothing has turned up."

"Outside interference to compromise Earth's position?"

"It's possible but not probable," admitted Kodally. "We kept a pretty good check on the approaches to Jarnos without anything turning up. We kept pretty quiet about the fact that we knew what was going on—but not quiet enough it seems."

Dawson cocked an enquiring eye.

"Within a couple of weeks of our finding out about this whole business," said Kodally grimly, "everything vanished."

"Eh?"

"Just so. Before we got the new equipment from Earth to help our investigations, everything was whipped out of sight and hidden with considerable alacrity. It seemed that the Jarnosians realised that we had detected what they were doing and had gone to hasty but effective means to cover up."

"Someone tipped them off."

"That would appear to be the case."

"So that for all you know they may still be receiving contraband information?"

"I should say it's an odds-on certainty since we've been able to do nothing in the way of counter measures."

"Have you tackled them about it?"

"What would be the use?" Kodally spread his hands wide in a gesture of frustration. "We should only be admitting to them that we are aware of the position. As things are, they cannot know for sure—"

"Unless the same person or persons passing out the contraband are aware that you're on to the game."

"That would account for the sudden disappearance of all the evidence," agreed Kodally. He placed his hands flat on the desk before him, and drew a deep breath. "However, I am happy to say that the problem is now yours, Mister Dawson. I need hardly tell you what will be the result if this is not cleared up satisfactorily. We shall continue with our routine investigations, of course, and anything which you may need you have only to ask for." He rose from his chair with the air of a man who had put down a particularly heavy load. "And now, I will show you to your quarters."

Dawson spent his first two days in the command ship studying all the reports and tapes and films and records that he could lay his hands on regarding the planet and its inhabitants. The ethnological survey placed the Jarnosians on a par with early twentieth century man—which was barbaric enough to warn any investigator that he could be sitting on a powder barrel. On the sociological side the Jarnosians had a feudal, two-class society of workers and overlords. All positions of power were hereditary, and it was only in the past few decades that the position of the working sections of the community had been materially improved. The bulk of power and wealth was in the hands of about seven per cent of the population.

It was a common enough picture, with only minor variations to differentiate Jarnos from any one of a score of other worlds that Dawson knew.

His next check—with the help of Kodally—was on the records of every one of the two hundred odd staff and crew of the command ship. It was a long shot, he knew, since every man and woman in the complement would have to be possessed of a personal record of ability and integrity which would stand up to the closest scrutiny. Dawson wasn't surprised that he found nothing.

After five days of hard, unrewarding work he was no further forward than on the day he arrived. He sat at breakfast on the morning of the sixth day and brooded idly on what he should do next. On all his previous jobs for the commission for

Spatial Projects and Colonial Exploration, Dawson had operated on the basis of carrying the fight to the enemy as far as possible—which was all very well when you knew there was an enemy, and was even better when you knew who the enemy was. So far as Jarnos was concerned he had not managed to turn up one single lead.

Kodally came into the mess and greeted him with early morning sourness. Dawson grunted a reply and resumed his brooding study of the swirling, brown surface of his coffee cup.

"And what will you be doing today, Dawson?" Kodally asked with mincing politeness.

"Uh?" Dawson glanced and frowned. "Oh, I don't know—"

"From which I assume that the problem is still a problem." Kodally slurped noisily from his own cup. "Well, I'm afraid that my day is booked. If you want any assistance you'd better call on Hennessey."

"Yeah, sure," said Dawson abstractly. The prospect didn't enthral him, for Hennessey, Kodally's assistant, was the sort of amiable giant who got to high positions in spite of his lack of technical qualification. Everyone liked Hennessey, and Hennessey liked everyone—despite the fact he was the finest living example of how to get on without working.

"I shall be conducting a party of Jarnosian overlords around the ship," went on Kodally pompously. "We arrange these visits at short intervals to promote friendship, and it ensures that our own visits to the planet surface are placed on a reciprocal basis."

"All right," said Dawson, anxious to stop the lecture. "I'll see Hennessey. Wait a minute though—" Kodally stopped a spoonful of food half-way to his mouth as Dawson beamed amiably in his direction. "This solves one problem. I was going to make a trip down to the planet to have a look at the natives, but this will save me a bit of trouble. How about if I tag along with you and your visitors?"

"Well—" Kodally looked faintly troubled.

"Oh, don't worry. I won't steal any of your thunder," said Dawson sweetly.

"That wasn't my objection," retorted Kodally stiffly. "Of course you may accompany us. The ferry craft bringing them is due just before eleven and I shall receive them in my cabin at that hour."

"Fine." Dawson grinned and rose from the table. "I'll be there just ahead of them."

He spent the next few hours in his own cabin and it was just before eleven when he heard the ferry announced over the intercom. He headed in the direction of Kodally's office, and the expedition head greeted him coldly. Dawson realised that his failure to produce a miracle answer was having its effect on Kodally's nerves. The man knew all too well that failure to clear the matter up satisfactorily would mean the end of his career—a career which, Dawson suspected, had been built up carefully and methodically under considerable stress and strain and under the additional handicap imposed by a lack of personality. Kodally didn't have the necessary attributes of physical or spiritual strength to have forced his way to the top without a great deal of hard work and mental strain. Now, he saw his whole future in the balance—and only Dawson could do anything to avert complete disaster.

Dawson sighed and wished that everyone was as phlegmatic and unworried as he was himself. Life would be much simpler.

A couple of minutes passed in silence that was only broken by the nervous tapping of Kodally's forefinger on the desk top. Dawson welcomed the knock at the cabin door which broke the mounting strain on his temper, and Hennessey came in grinning hugely as usual, and followed by half a dozen gorgeously attired aliens.

Hennessey was a large, raw-boned Celt with short red hair and a rough, craggy face that had an undoubted attractiveness. His eyes were light blue and lazy, and he contrasted violently with the shorter, lithely built Jarnosians who were as beautiful as their clothing.

Dawson blinked in surprise. He had seen pictures of the Jarnosians and had read descriptions of them, but the reality surpassed his own expectations. Physically, they were as attractive as any race he had ever seen, their reddish skin contrasting sharply with large, liquid brown eyes, and a crown of jet black hair that was wonderfully coiffured. For an instant he wondered what sex, if any, they possessed. Their clothing consisted of a series of multi-coloured gowns, each shorter than the one beneath, and all made of a light, floating material that gave added beauty to their movements as they walked. For the rest, they possessed wide mouths with thin,

dark red lips, and aquiline noses from which protruded the white plastic filtration tubes. Terran air was as nauseous to them, it seemed, as their atmosphere was to Terrans.

Kodally rose from his seat and greeted them with a few flowery but ritualistic phrases in the Jarnosian tongue as Hennessey introduced each of them in turn. The conversation had switched naturally from English, and Dawson was pleased to find that his hypno-course had been thorough and comprehensive.

The tour of the ship proceeded slowly, and Dawson kept well in the background studying the aliens as closely as he could. They evinced an overwhelming interest in anything and everything—so much so that the tour developed into a microscopic examination of everything from wall decorations and furniture to the air exchange system and the power plants. Dawson realised early on that if even one half of the questions they asked were answered completely and truthfully then the Jarnosians would have sufficient information to account for another flood of contraband knowledge. But he saw quickly that Kodally and his section heads knew what they were about. Some questions were answered fully and concisely, but most were either skilfully avoided or explained away in a glib mixture of half truth and technical gobbledegook that brought a smile to Dawson's lips on more than one occasion.

It was late in the afternoon when the tour ended, after almost five hours of walking along corridors, poking into machine rooms, inspecting private quarters and generally acting like a party of Terran tourists at the Martian burial grounds.

Dawson sank wearily into a chair in Kodally's office after the farewells had been said and Hennessey had ushered the visitors in direction of the main hatch.

"Well?" Kodally looked at him wearily and asked the question in a tone which showed that he didn't expect an answer.

"I don't know." Dawson shook his head. "One thing's certain, they're the most inquisitive bunch of jokers I've ever come across. Is it always like that?"

"Yes. They just love to ask questions—even if the answers don't make sense."

"How often do you get groups like that?"

"Oh, we're bombarded with requests every day," Kodally told him. "If we granted them all we'd have the whole crew on

conducting tours right round the clock. We have to be diplomatic and keep them down to a group about every seven or eight days ship time." He leaned back in his chair and stretched. "I suppose it's too much to hope that the tour gave you any ideas regarding the problem at hand?"

Dawson chuckled. "All knowledge is useful, Paul. Somewhere there will be a little piece of data that'll fall into place and prove to be the open sesame—and once that happens—" he shrugged.

"And if it doesn't happen?"

Dawson rose from his chair and crossed to the door. "Then you and I, Paul, will be looking for jobs as bar tenders," he said grimly.

For the next week Dawson prowled and probed in every possible direction. He talked to crew men and department heads, he studied records on Jarnos and its inhabitants, and he paid three separate visits to the planet itself.

The main Terran base had been established in the centre of the main continental land mass, and close to one of the largest of the Jarnosian cities. It was manned by a permanent force of six crew men from the command ship who stood duty on weekly rota. During his first visit he was surprised to find that there was a close resemblance between the Jarnosian style of building and Terran architecture of the early twentieth century. Most of the buildings were constructed of brick or stone slabs, and their design was clearly aimed at allowing the maximum passage of light and air. The streets were wide and straight, and were thronged by ancient, smoky vehicles that burnt solid fuels of one sort or another.

The main thing that impressed him was the difference between the gorgeously clad nobles and the soberly dressed bulk of the people—the working majority of the population. Dawson had heard of class societies but he had never seen one that was so sharply defined and so clearly marked as that on Jarnos. Almost, it was as if the planet had two separate races.

Even on this first visit something touched his mind—some nebulous fact or suspicion that refused to coagulate into anything more solid than a mere hunch. It was an old sensation and he didn't try to force it. By the third visit he was sure that the answer was to be found and that it was not very far away.

"I only wish I had your optimism," Kodally grunted when Dawson mentioned it over an evening meal on his return from the planet.

"It isn't optimism," Dawson told him bluntly. "It's experience, Paul. When you've been in this business as long as I have you get to recognise things—oh, they may not click at once, but sooner or later the last piece fits in and that's it. One thing I am sure of, if it's any consolation to you, none of your people are involved."

"You say an awful lot without meaning anything," Kodally picked idly at the food before him.

Dawson chuckled. "Don't be so sour, Paul. Talking is one of the things that help—all the time a picture is growing—a picture that will be finished one day and on that day the whole thing will be clear."

"In a pig's eye," snapped Kodally rudely. "You'll be reading crystal balls next."

"Maybe," agreed Dawson happily. He dropped his fork on the plate before him, and stared unseeing at the white expanse of table linen before him. Kodally looked at him as he brooded and laughed sharply.

"I suppose you'll be saying next that the picture's finished," he snapped sarcastically.

"Hm?" Dawson glanced up as the spell was broken, and smiled broadly. "Oh, well, yes. I think you might say that." He licked his lips like a cat over a saucer of cream. "Yes, Paul, I think you might say that quite truthfully. When's that next group of Jarnosians due aboard?"

Kodally blinked in surprise. "Two days time. Why?"

"Never mind. What sort of medical staff have you?"

"Eh? Look, Dawson—"

"How many?"

Kodally glowered angrily. "Well, there's three medical specialists and four researchers who have qualifications to practice."

"Any psychiatric practitioners among them?"

"Of course. There's Bonetti who specializes in alien psychology, and Templer is the general crew physician—he's got a degree from Leyden as a psychiatrist and neurologist."

Dawson grinned seraphically. "Fine! Wonderful! What more can I ask for? Have them come along to my cabin in—er—let's say an hour. All right?"

Kodally looked at him with blank astonishment written across his thin face. "What's all this about?" he demanded.

"I'll tell you some other time," Dawson smiled.

"Dammit, I demand—"

Dawson tutted gently. "Now, Paul. That's no way to talk to someone who's just about to save your skin—not to mention his own." He left Kodally spluttering in futile anger and went back to his cabin.

The two doctors were closeted with Dawson for best part of an hour, and when they put in an appearance in the officer's mess they refused to mention one single thing that had been discussed. Kodally's hints were ignored, Hennessey's direct questions were fended off, and a final outraged demand from Kodally to be put in the picture was apologetically refused. Bonetti sat quiet and stroked his tiny pointed beard, while Templer buried himself in an abstruse technical journal.

Dawson, too, refused to discuss the matter, and for the next thirty-six hours an air of simmering anger and frustration brooded over Kodally and his department heads. The result was a silent mess and a series of meals wherein conversation was at a premium.

At breakfast on the day of the visit Dawson made the first opening in the screen of silence that had developed between him and Kodally when he asked, "What time do our guests arrive?"

"As usual. 'Bout eleven," replied Kodally grudgingly.

"I'll join the party as before, if I may?"

"I can't stop you," snapped Kodally, in a tone that implied he would if he could.

"That's right," Dawson agreed happily. "Now, there's one other thing. I wan't Bonetti and Templer to take a trip in one of the scout craft during the time those Jarnosians are on board."

Kodally eyed him suspiciously. "Where to?" he demanded.

"Oh, anywhere at all. I'm not fussy. Just make sure they're not within a hundred miles of the command ship."

"What in hell are you playing at?"

"All in good time, Paul," Dawson admonished him lightly.

"All in good time. How about that scout?"

Kodally scowled. "I'll give the orders."

"Make it for ten forty-five, will you. I'll be in your cabin just before eleven."

To add to Kodally's annoyance and frustration Dawson went into a closed conference with Bonetti and Templer at ten o'clock from which none of them emerged until forty minutes later. The two doctors embarked immediately in the scout which had been ordered for them, and headed off into outer space with the comic but unfortunate comment that they'd be back in time for tea. Dawson joined Kodally in his cabin and beamed his way through an uncomfortable silence that lasted until the latest group of Jarnosians was ushered in by Hennessey.

They were no different from the previous party that Dawson had seen. Their clothing was as brilliant and their beings as beautiful; their reactions during the tour were the same, and their questions as varied and numerous. At least, in the beginning. As the tour progressed an atmosphere of unease seemed to develop and shroud the whole group—alien and Terran alike—and it grew in intensity as the time passed. It started with Kodally and Hennessey, each of whom eyed Dawson from time to time with dark suspicion, and it spread to the department heads who joined and left the party at regular intervals. It was as if all of them were expecting Dawson to turn into a purple skinned jack rabbit at any moment, and even the Jarnosians seemed to become infected by it as the tour went on.

Their questions became less and less torrential, and each of them began to copy Kodally and Hennessey in casting furtive, puzzled glances at the silent, implacable figure of Dawson who followed them everywhere. As a result the tour ground to an uneasy premature halt by the main hatchway with the aliens exhibiting every indication of wanting to leave the command ship as soon as they possibly could.

The usually slow ritual of farewell was conducted with a hasty solemnity as the members of each group bowed and spoke the set Jarnosian phrases of farewell.

The leader of the alien group turned, finally, to Dawson, bowed and said hurriedly, "May the peace of your homeland dwell forever with you while you are absent from it."

Dawson bowed in turn, hesitated, and opened his mouth to reply. Kodally and Hennessey gaped in astonishment as his lips moved but no sound came forth. The effect on the aliens was as galvanic as an electric shock.

The face of the leader contorted into a mask of outraged horror and anger as he shrieked at Dawson, "You have insulted my honour and my father's honour—" He broke off suddenly, the rage fading and dying to be replaced by a horrified understanding of something that was lost on Kodally.

Dawson shook himself slightly, and grinned lopsidedly at the expedition head. "Sorry about that, Paul," he said. "Get this bunch of monkeys back home as soon as you can, and send out a recall for Bonetti and Templer. I want them back as soon as they can make it. I'll see you and Hennessey in your cabin." He chuckled. "I guess a few explanations are called for."

He turned away leaving a group of shocked aliens and bewildered Terrans to watch his departing figure.

"And now," snapped Kodally angrily as they settled themselves in his cabin, "perhaps you will be good enough to explain that pantomime we've just witnessed."

"Sure, Paul," Dawson stretched himself. "First, you needn't worry about breaking the contraband law any more. No one from your command, or from outside, is responsible for that."

Kodally brightened visibly.

"Second, I owe you an apology for not letting you in on this from the start, but you'll see why I couldn't in a minute. Like I said before, Paul, it's just a matter of relating facts until you have a complete picture, and my picture was completed after my last visit to Jarnos. I noticed one rather unimportant fact—unimportant until you thought about it, that is—"

"For heavens sake get to the point," snapped Kodally impatiently.

"Well, I noticed that none of the overlords seemed to speak to each other in public places."

Kodally looked bewildered. "So?"

"They spoke to the workers and the workers spoke to them and to each other, but the ruling clique—" Dawson shook his head. "Never a word. Well, it doesn't suggest much at first, I admit, but if you think about it there could only be one answer—they don't need to speak to each other because they're telepathic."

Kodally's eyes popped in amazement, and there was a moment of stunned, incredulous surprise as Dawson's words sank in.

Then Hennessey said slowly, "Of all the stupid, cranky, half witted ideas—"

"I thought you'd say that," sighed Dawson. "I'll admit I wasn't convinced myself without proof, that was the reason for that little—ah—pantomime by the main hatch. I had to get proof somehow, and how the hell do you get proof from a telepath who can read your mind and is two moves ahead of anything you can think up?" He grinned. "That was where Bonetti and Templer came in. I talked it over with them and we arranged for me to have a short course in hypnotic suggestion—both of them of are hypnotists, you know."

"I know that," snapped Kodally. "They have to be to get degrees."

"Yes, well, they established a hypnotic block washing out the knowledge from my consciousness that the Jarnosians are telepaths. Then we arranged a key that would release the trap we got worked out."

"Trap?" said Kodally.

"When the leader of the group offered me the ritual farewell, as he was bound to do, that was the key that operated my own actions—quite involuntarily, of course." Dawson chuckled. "I returned his farewell phrases with a few choice Jarnosian oaths casting aspersions on him and his ancestors that constituted the foulest obscenities that a Jarnosian can think up."

Hennessey gaped at him in bewilderment. "But you never said a word."

"But my lips moved," Dawson told him, "and while that happened I was thinking all those nice things about his family. It had the effect that Bonetti and Templer foresaw. He was so shocked and insulted that he didn't realise for a second that I wasn't actually talking out loud, and he reacted accordingly—oh, yes, he certainly reacted."

"But—" Kodally choked slightly, "But why all that mumbo jumbo? You could have done that anyway."

"Oh, no. He would have read the intent in my mind beforehand—or in yours or in the mind of anyone who knew what was going on."

"That was why you sent Bonetti and Templer away in that scout," supplemented Hennessey.

"Right in one," grinned Dawson. "Now perhaps you see how they got all that information. Every time they asked a question the correct answer was bound to pop into the head of the technician concerned even before he slid away from the

issue with some offbeat answer." Dawson grinned at Kodally. "No wonder you had so many requests for conducted tours."

Kodally grunted. "Are you sure it only applies to ruling group?"

"Well, the working masses all seemed to jabber at each other in the accepted manner, so it's obviously the explanation behind the big social gap—though whether it's through training or heredity is something that'll have to be looked into."

"How come they didn't pick you up as soon as you realised what was happening?" asked Hennessey.

"Sheer good luck. The penny didn't drop until I was safely back aboard. If it had—" Dawson shrugged expressively.

Kodally relaxed in his chair, the lines of worry fading from his thin features as he smiled tautly at Dawson. "Well, it's a load off my mind. I didn't think it would be as easy as that to clear up."

"It isn't cleared up by a long shot," snapped Dawson.

"Eh? But—"

"Can you imagine what that bunch could do in ten years if they got loose in the Galaxy? You can't fool a telepath, Paul. If they want information they'll get it, and there won't be a damn thing you or anyone else can do about it."

Blank silence cloaked the cabin as the import of Dawson's words sank in.

"Extermination?" asked Hennessey.

Dawson shook his head. "The Galactic Council would never agree to that. If you do it for one reason you could do it for another. Anyway, there would be no guarantee of one hundred per cent success."

"What, then?" said Kodally pitifully.

"First we stay here and keep watch until some sort of answer presents itself—"

The visiphone on Kodally's desk buzzed sharply, startling them all out of their tension. Kodally answered it and his eyes swivelled to Dawson as he listened.

"All right," he said and replaced the instrument. Then to Dawson, "There's a scrambled call from Earth for you, Dawson. Emergency from a man named Hendrix. It's laid on in the Communication cabin."

Dawson groaned and lifted his eyes to the grey deckhead of the cabin. "That guy must be psychic," he proclaimed

bitterly. "I'll get right down there. You'd better come too, Paul."

On the small screen in Communications centre Hendrix face looked out in grey miniature, the inevitable black cigar looking even more dominating than it did in reality.

Dawson sat down and said, "Hi, boss," with resigned disinterest.

"What kept you?" snapped Hendrix. "These calls cost the Commission money."

"They can afford it," said Dawson wearily.

The black cigar jerked threateningly. "What's happening out there, anyway?"

"I was just about to file a report to the effect that the job is completed—at least, the problem is solved for the moment."

"Yeah?" snapped Hendrix. "Then you can think again, Dawson. The combined Lutheran and Tracchoni delegations to the Galactic Council have given notice of a censure motion to be presented at the next session in three months time."

"What?"

"That's right. They've given hint that it is to do with the Jarnosian affair." Hendrix lips closed round the cigar with rat trap security. "All right—what's your story, Dawson?"

"When did this happen?" Dawson demanded grimly.

"Two days ago. We got word of it about twenty-four hours ago Terran."

Dawson relaxed. At least there was no break on the current developments, the censure motion must have been filed on detail that was at least a week old, maybe even longer.

"Well?" said Hendrix menacingly.

Dawson sighed and launched his story without any frills; he detailed the facts as they had occurred and the problems as they had arisen. Hendrix listened without comment, but his face grew progressively blacker until it settled into an uncompromising expression of grim impassiveness that Dawson knew so well.

He ended the story and waited for Hendrix reaction—it wasn't long in coming.

"You tell more funny stories than any other guy I ever met," growled Hendrix.

Dawson sighed. "It wasn't meant to be funny—"

"Shut up," howled Hendrix, and his face grew larger as he bent nearer the transmitter at his end. "Now, you listen to

me. I don't care what sort of crack-brained antics you've been up to, all I want out of you is something to call off this damned censure motion. The news about Jarnos has got out somehow and there'll be the biggest row you ever saw if you don't pull something out of the fire."

"Dammit, boss," Dawson protested, "they can't pin anything on us. I can prove every last word—"

"You want to bet?" snapped Hendrix. "I'll tell you, for nothing, Dawson, that our whole colonial policy will be in the balance if you don't come up with something. Not to mention your job with the Commission. It's all yours, brother, and you'd better do some fast thinking."

The screen faded and went blank as Hendrix cut the connection, and Dawson heard a thin whistle of relief from behind.

"Phew," said Kodally softly. "He's a real ball of fire."

"Take no notice," Dawson grinned wryly. "He can have my job tomorrow if he wants it—and he knows it."

"Well, you were right. The trouble hasn't even started."

"I didn't think it would break this fast," Dawson admitted. "It doesn't give us any breathing space at all."

"Wonder how the news got out?"

Dawson shrugged. "It could be any one of a dozen ways. The only thing I am sure about is that no one is aware that these people are telepaths aside from ourselves and the Commission."

"You mean that helps?" Kodally looked puzzled.

Dawson rubbed a hand tiredly across his eyes. "No, I don't think it does."

"So what do we do?"

"Well," Dawson got up from chair. "For a start I'm going to get some sleep. Maybe I'll have some happy dreams."

For a week Dawson wandered aimlessly around the ship, pondering the position. He had daily conferences with Kodally and with Hennessey in an effort to find some way out of the whole nasty mess. He called in the department heads and asked for ideas. None were forthcoming. They couldn't leave Jarnos; they dare not try to put matters right by force; they could do nothing except watch and think.

"You can't kill knowledge that has once been gained," remarked Hennessey one day. "They'll be bound to make use of it as soon as our backs are turned, or as soon as they're strong enough."

"Couldn't we just wait for the censure motion to be debated," suggested Kodally, "and then dump the whole mess in the Council's lap?"

Dawson laughed hollowly. "I'd like to see you trying to sell that idea to the SPACE Commission."

"Why can't we threaten them with dire disaster if they make use of anything they've learned?"

"Paul," said Dawson patiently, "I already explained to you that you can't lie to a telepath. You know perfectly well that the council would never sanction such a scheme, and they would know it as well, the moment you opened your mouth."

The conversation lapsed into a gloomy silence as a dozen similar sessions had done over the past week.

"Or can you?" said Dawson suddenly.

"Eh?" said Kodally.

"Or can you?" Dawson sat up straight, a slight smile on his face and a light in his eyes that had been missing for some time.

"Or can you what?" demanded Hennessey.

"Lie to a telepath." Dawson stood up. "Paul, what sort of library do you have on this ship?"

"Well, pretty good. Tapes, books, video rolls. Say, what—?"

"Will you have anything comprehensive on the Rhan incident?"

"What?"

"We mentioned it the first day I was aboard, remember?"

"Of course I remember. I should think we would have."

"Then get it all down to my cabin, and tell Bonetti and Templer to come along as well."

"How about me?" Kodally asked plaintively.

Dawson chuckled. "Yes, I think you'd better come along, Paul."

There followed several weeks of furious activity spearheaded by Dawson and Kodally, and punctuated by frantic calls from Hendrix as time slid inexorably past. Not that the calls did Hendrix any good. Mister Dawson was never available.

The command ship and its crew became a small, impenetrable cell which kept its knowledge to itself.

The only information that Hendrix got was the fact that Dawson and Kodally had left Jarnos in a scout craft and were headed Earthwards, just one month before the date set for hearing of the censure motion by the Galactic Council.

The movement was noted by a puzzled and worried Hendrix, and by the unemotional computers of the SPACE Commission. In due course, the information was added that Dawson and Kodally had stopped briefly at the headquarters of the Council, stayed for a few hours and then departed Earthwards once again. The SPACE Commission records were kept up to date, and Hendrix blood pressure was kept up. The climax was reached a few days after when it was learned that the Lutheran and Tracchoni censures had been withdrawn and hurried apologies had been made that were as begrudging as they were profuse.

Further investigation revealed that the Terran delegation to the Council had filed a fully documented agreement signed by the Jarnosian government agreeing to strict supervision of its whole technological development by such accredited agents as should be appointed by the Council. The agreement also covered trade, mineral development and a dozen other facets of commercial contact on terms that were so favourable that even hardened negotiators blinked in surprise.

And for almost five weeks Hendrix had been saying, "I don't know."

He said it in tones which ranged from the respectful to the irate, according to the rank of the person who happened to ask what was going on. The SPACE Commission asked every other day. At first they were polite enquiries, later they became terse requests, and latterly they had degenerated to the level of angry commands. Efforts to contact the scout ship were unavailing, and Hendrix' temper descended to the primeval as the days drew into weeks.

His secretary took a hurried sick leave in the hope that by the time she had recovered the whole business would have blown over and Hendrix would have returned to his former comparatively ill-natured self. It was during her first days absence that the door of Hendrix office was opened gently to admit the smiling, happy form of Johnny Dawson followed by the slight, equally happy figure of Paul Kodally.

Hendrix bloodshot eyes popped in disbelieving rage and the ragged stump of a mashed cigar dangled precariously from the lower lip of his open mouth.

"Good morning, chief," said Dawson politely. "This is Paul Kodally. He—um—had a hand in the Jarnos affair. You lost your secretary or something? Pity, she was a nice girl."

Hendrix sat and fairly gobbled with rage ; he stood up and gobbled harder, and Dawson cast an anxious glance at Kodally as his chief began to pound the desk with one clenched fist in a paroxysm of passion.

"Something the matter, boss ?" he enquired.

"The matter ?" howled Hendrix. "Of all the addle-headed, stupid, nincompoopish, half witted—" Hendrix collapsed in his chair as words failed him, and Dawson eyed his purple face with some concern.

"You feeling all right ?" he enquired anxiously.

All the pent up anger and emotion of the past weeks slid out of Hendrix being in one rush of frustrated hopelessness. He sat slumped at his desk like an empty balloon from which the air has suddenly been released. He looked pleadingly at Dawson.

"I'm an old man, Johnny, and I can't take things the way I used to. Why didn't you call me after you left Jarnos ?"

Dawson smiled. "Well, we daren't let anything out before we'd sewn the whole thing up. There was just a risk that the Lutherians and the Tracchoni would have managed to cover their end if they'd had any warning of what was happening."

"Still, you could have let me know once you'd filed the treaty with the Council."

Dawson frowned. "Not really, boss. Something went wrong with the scout's communication unit." He grinned disarmingly. "Someone pushed the wrong button or something."

Hendrix closed his eyes in a semblance of prayer. "I couldn't begin to guess who." He opened them and stared grimly at Dawson. "All right, now give me the whole story. How did you get out of this mess and how did you get the Jarnosians to sign that treaty ?"

"Quite easy, really, wasn't it, Paul ?" said Dawson.

Kodally returned his smile and nodded.

"So help me," yelled Hendrix with a sudden burst of his old fire, "I'll have your giblets for a necktie—"

"All right, all right," Dawson held up a placating hand as he recognised the familiar signs that his baiting had gone far enough. "Seriously, it was easy once we'd got the basic idea. You remember the trick we had to pull to prove that the ruling classes were telepaths ?"

"It's burnt indelibly on my heart," grated Hendrix.

"Same problem. How do you lie to a telepath?" Dawson shrugged. "The only way to do that is to believe in something so utterly and completely that the telepath will see that belief in your mind—that way you can convince him of anything."

"Sounds nice," growled Hendrix. "How about the detail?"

"The only way you can do what I just described," said Dawson, "is by hypnosis. It's a basic therapy for some mental disorders, you know. Psychiatrists hypnotise people into believing what is good for them—"

"For heavens sake," roared Hendrix, "I don't want a blasted lecture."

Dawson winced and went on, "Yes, well, get yourself hypnotised into believing everything you want your telepath to believe and your problem is halfway to being solved. I picked on the Rhan incident as being pretty comparable with the Jarnos affair in the broader detail. First, we had a newly discovered race, second, we had the contraband knowledge, third, we had a Galactic flare up that resulted in the contraband laws."

"Sure, I know all that," said Hendrix impatiently. "But the Rhan incident was caused by outside influence."

Dawson chuckled. "The Jarnosians didn't know that. Paul and I had all the tapes, books and films on the Rhan incident edited so that it appeared to run parallel to the Jarnos affair. Then we showed the Jarnosian rulers just what had happened to the Rhan when they tried to take on the whole Galaxy." Dawson grimaced. "It wasn't very pleasant by the time we'd finished editing."

"But that took place four centuries ago," objected Hendrix.

"We knocked a nought off and called it four decades," put in Kodally smoothly.

"And they believed you?"

"We believed it ourselves after a few courses of hypnotic impulsion," replied Dawson. "The films and tapes of the Rhan incident convinced them that their whole world would be flattened if they went on with what they were planning."

"They were planning what you feared?" asked Hendrix.

"Not much doubt about it," admitted Dawson.

"They destroyed everything they'd developed from their little mind reading forays," said Kodally.

"And practically fell over themselves to sign the agreement we drew up," added Dawson.

Hendrix beamed like a cherub over a bunch of grapes. "There's one thing about you, Johnny," he purred. "You always deliver the goods." He chuckled forgivingly. "Just between you and me, I'll believe your story about the communication breakdown on the scout."

"That's nice," said Dawson.

"I'll put you in for a nice long vacation, too. The Commission will be very pleased with my department when I report to them," Hendrix went on expansively.

Dawson rose slowly from his chair. "Well, I don't know if they will, boss," he said dubiously.

The smile slipped from Hendrix face. "Why not?" he demanded.

"You mean you haven't heard?"

"Heard what?" grated Hendrix dangerously.

"Perhaps they're trying to keep it quiet."

"Keep what quiet?" yelled Hendrix. "Dawson, I know you. What the hell are you talking about?"

"I—we—um—filed that treaty without having it looked at properly," said Dawson awkwardly. "I didn't know it until it was pointed out later, but agreements with under-developed races which are in the process of a preliminary survey are controlled under the exploitation laws."

There was a deathly silence.

"I imagine," went on Dawson, "that just about now the Lutherians and the Tracchoni are finding out exactly what went on on Jarnos, and I don't think they'll waste any time telling the Jarnosians." He looked thoughtfully at his superior. "They'll probably find out quite soon that they've got a case under the exploitation laws."

He crossed slowly towards the door, followed closely by Kodally.

"Uh! Well, it's nice to see you again, boss. I'll look in again when I've had that vacation you promised."

Dawson and Kodally were safely out in the corridor when the sounds of bull-like roaring first reached their ears.

"You wouldn't believe it, Paul," Dawson remarked happily, "but Hendrix office is supposed to be sound proof."

Lan Wright

Astronomical observations and photography will best be conducted outside the Earth's atmosphere, but until we have a Moon station or permanent satellites, scientists will have to make do with the best means available—balloons. Here is what has been happening to date

OUTWARD BOUND

7. Planning For Tomorrow

by KENNETH JOHNS

The need for astronomical observations from above the atmosphere has often been stressed as being one of the major aims of the exploration of space. Dust in the bottom mile, turbulence at heights up to four miles and virtually complete absorption of ultraviolet light at twenty-five miles up are all well known barriers of our atmosphere preventing complete and satisfying observation of our environment.

Looking to the future, Fred Hoyle, an astronomer who holds very advanced views, has said that it will not be long before we have at least 20-inch telescopes in satellites. This will in all probability be part of Project Nova in 1960-61. Yet others feel that this is optimistic, and we should not wait until this materialises; that astronomers should go ahead with every new means to obtain clear pictures *now* from as high up as possible.

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Both these attitudes, which are easily reconcilable, are in refreshing contrast to the publicly expressed views of other scientists and astronomers who would just keep on building more and bigger telescopes at ground level. This odd blind spot where they fail in furthering their profession through the opening opportunities and advantages of space research and exploration is a hindrance to space travel by the very people who at first stand to gain the most from it. In pursuit of the 'see as much as we can now' school of thought, much work has been done that already has brought in unexpected dividends.

The U.S. Naval Laboratories have been launching Aerobee-Hi rockets to photograph the Universe as seen by ultraviolet light from at least 100 miles up. In March, 1959, excellent photographs of the Sun taken by the ultraviolet light emitted by hot hydrogen were obtained. Hydrogen needs to be at 6,000 to 10,000°C before it emits, so the photographs show the hotter clouds 5,000 miles above the Sun's surface, a stormy, strange and bewilderingly new Sun.

To obtain these photographs, the visible light was filtered out by a 15,000 lines-to-the-inch grating fitted to a camera that automatically locked onto the Sun's image, and followed it as the rocket moved near the peak of its trajectory.

By using the still shorter ultraviolet waves emitted by ionised helium gas, needing 20,000 to 30,000°C to excite it, the U.S. Naval group intend to photograph the greater turbulence of the clouds of gas still farther out from the Sun's surface.

Already the U.S. Naval Research Laboratory has built up a picture of the cosmos as seen in far ultraviolet light using Geiger counters filled with nitric oxide gas. The assembly is made directional by using small tubes to limit the angle of acceptance of the ultraviolet. Some regions of the sky showing no visible radiation are intense sources of ultraviolet—they may be clouds of gas excited by plasma shot out by a blue hot star. In addition, the space around Earth has been found to be glowing as ultraviolet light is produced by particles from the Sun exciting the interplanetary gas.

Other astronomers concerned more with good seeing have been using balloons to carry their equipment, and sometimes themselves, above the more turbulent layers of the atmosphere. Rubberised silk balloons have lifted a half ton to a height of

five miles ; whilst giant polythene balloons will take 4 to 5 tons up to 16 miles.

The French astronomer, Dr. Dollfus, by using 105 or so small cheap rubber meteorological balloons tethered to a nylon cable, has been able to carry three-quarters of a ton to a height of eight miles and expects soon to do better than this.

Dr. Dollfus is the pioneer of major astronomical balloon ascents, making the first one in 1954 in an open basket, and, in 1956 and 1957, obtaining really first class photographs of the granules on the Sun's surface, taken from a height of almost four miles, again from an open basket and using an 11-inch telescope.

In November 1956 and April 1957 Dr. Schwarzschild of the University of Princeton used large unmanned polythene balloons carrying an automatic telescope to obtain even better photographs of the Sun's surface from a height of sixteen miles. His only trouble was caused through the vibration of the motors used to keep the telescope locked onto the Sun.

Dr. Dollfus then decided to attempt to analyse the upper atmosphere of Venus by the standard method, comparing the spectrum of the light reflected by Venus with that from the Moon. But Dr. Dollfus intended to refine the method by making measurements in the infrared regions—using a narrow band filter and a photo-electric cell—where absorption by water is particularly strong. Using the new onion string technique of small balloons, he hoped to lift a 12-inch telescope and a pressurised gondola high enough for Earth's atmospheric absorption by water vapour to be very small.

He was ready in December, 1958 ; but the weather was too windy—launching the onion string of balloons must be a delicately difficult task—and it was not until April 1959 that he made the ascent. 105 balloons were attached to a 1,500 foot length of nylon cable in groups of three, above the gondola, radar reflector and parachute. Up to eleven of the balloon groups could be released by explosive charges fired by radio control from the gondola. Some balloons unfortunately burst on release and others burst when the top of the onion string ran into a 70 miles per hour jet stream ; so a height of only eight miles was achieved. This was too low to escape the terrestrial water vapour absorption so the results were disappointing—but there will be other attempts.

The American Princeton group have plans for a balloon-borne 36-inch telescope which will be large enough and ascend high enough to make determinations of the red shift of distant galaxies in the ultraviolet band. Too, the Americans have completed their 84-foot diameter steerable radio telescope in Maryland and are planning a 400-foot diameter steerable one. This will complement, not rival, the Jodrell Bank 250-foot radio telescope.

Getting down to Earth, the end of 1958 saw two important meetings. The first was that of COSPAR—the Committee for Space Research—whose first meeting under the International Council of Scientific Unions, took place in November, 1958. At its second meeting, in March 1959, it set up a committee to take over the work of CETEX (article in the April, 1959 issue of *New Worlds*) in countering extra-terrestrial contamination and also included in this the contamination of the Earth's upper atmosphere by nuclear explosions.

The second important meeting, in December 1958, was the United Nations debate on space, the illuminating and terrifying failure of the nations of the world to set up a UN Space Agency. Some of the 'double-thinking' expressed at the meeting would be unbelievable if encountered in a science fiction novel. Space is too short here for a blow-by-blow account of the seven days spent in attempting to reconcile the USA and USSR; but an excellent article with quotations from the speeches is contained in the March 1959 issue of *Discovery*. Since the debate was not fully reported in the national press, try to read this article if only to see how mistrust builds mistrust and international co-operation is prevented—at the final expense of every one of us.

October 1958 saw an extremely important American decision—the setting up of a single civilian agency to administer all the USA's multifarious space research projects. This agency is the National Aeronautics and Space Administration, NASA for short, replacing the old NACA.

Its immediate objective was to end rivalry in space research by the US Navy, Army and Air Force, and to prevent the duplication of experiments and development engineering. In theory, it has nothing to do with missile technology, which is covered by the Advanced Research Projects Agency of the Defence Department. NASA also has no authority over the

Discoverer satellites or the development of nuclear rockets, these being handled by the military and the AEC respectively.

But, except for those three items, the sky has no limit for NASA. It has \$500 million to spend on space projects this year and already employs 10,000 workers, either directly or by its many contracts. Next year its budget may well be \$1,000 million. NASA, with headquarters in Washington, is essentially an administrative tool, planning, co-ordinating and arranging contracts for research and construction. It has taken over Project Vanguard and its staff and is directly responsible for Project Mercury.

Under its care, 30 American Earth satellites and space probes and 140 sounding rockets will have been launched in 1959 and 1960.

After that the big-thrust rockets, such as Vega, of which eight have been ordered, will be ready. They will be used, among other things, to send an unmanned 100-lb probe to Venus, probably in 1961. The total cost of these big rockets will be at least \$2,000 million and as is usual with these projects, probably more. The cover name for all these big rockets is Project Nova.

From the angle of technical progress, as apart from some clarification in the jungle of American missilery, part of the Project Nova scheme is the increasing use that will be made of liquid hydrogen as a fuel for the large Centaur motors. Liquid hydrogen is rapidly being pushed ahead as a rocket fuel despite the difficulties inherent in its use. Although liquid hydrogen boils at 37 degrees absolute and forms explosive mixtures with air, burned with LOX it gives almost half as much thrust again as comparative paraffin and LOX fuels. The Aerojet-General Corporation has been ground testing 100,000-lb thrust motors using liquid hydrogen over the past eighteen months.

Understandably enough, NASA is being very cagey about giving dates for each of its steps towards space travel, and this can only be considered a wise decision—in view of the chequered history of the Vanguard—however frustrating it may be to those who are anxious to keep in the picture of man's exploration of the space on his doorstep.

Divorcing space and missile research is a logical step. Missiles need only to deliver small payloads and missilemen are content with lower efficiencies than are necessary for

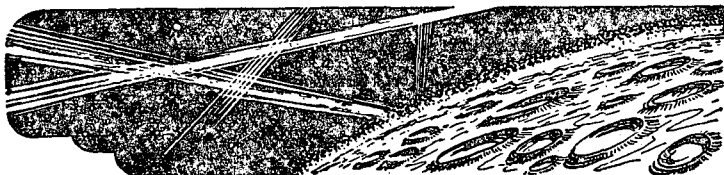
manned space flight. In addition, however, true space travel enthusiasts whilst acknowledging that missiles have contributed most of our knowledge of rocketry, cannot but be thankful that at last space travel is off under its own power and need no longer shrink in the shadow of military needs.

NASA is also actively concerned in any space research and associated studies, whether it be radio communication, weather forecasting by satellites, composition of the upper air, gases in space around the Moon or surface conditions of Mars and Venus.

The soon-to-be-launched 150-foot diameter plastic satellite covered with aluminium will be followed by ten to twenty more, all in orbit at once, so that short wave radio reflection can be used experimentally—and probably commercially—to span the Atlantic. A prior larger-scale idea of this was the recent transmission of messages to America from Jodrell Bank by bouncing them off the Moon. One-way only was possible as at the moment the Americans do not have the British equipment to transmit Moon-reflected radio messages to Britain.

NASA will make one of the larger satellites available for COSPAR to use for experiments suggested by COSPAR members: It will carry 100 to 300 lbs of payload into a 1,000 to 2,000 mile high orbit. What the British contribution may be, and whether or not our own launching vehicles may be used, is still a matter under discussion. From a shaky start, satellites are rapidly becoming a commonplace. In fact, rocketry is going ahead so fast that the projected satellites are running ahead of ideas for experiments.

Kenneth Johns



As a fifth-columnist in the heart of the main city on Earth, Gary Towler has now placed himself in the unenviable position of having to do something desperate in order to expose the corruption rife on the planet. But what? Either way, he cannot win.

X FOR EXPLOITATION

by BRIAN W. ALDISS

Part Two of Three Parts

foreword

The Empire of Partussy contains four million planets, ruling them with a just if heavy hand. Earth has been within the Empire's boundaries for a thousand years, subject to a long line of Commissioners, a mere colony world half a galaxy away from the Queen Planet itself. Now, however, a new Commissioner rules, threatening the last of the old native culture with utter obliteration as he exploits the governmental system for his own ends. Nobody can call him to book, for he has friends and bought nals (the tripedal master race) on Castacorze, the chief planet in Vermilion, the Administrative Sector of space in which Earth is included.

A human patriot leader puts up ineffective resistance to nal rule—ineffective because terrestrials have no weapons to match the might of Partussy, and because most nals live in an impregnable Commission City in the Greatbrit division of Earth.

At this point in time, four beings play a leading part in affairs, two nals, two humans. First must be mentioned the Partussian Commissioner himself, High Hiscount Chaverlem PAR-CHAVORLEM. His chief interpreter, a terrestrial named

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GARY TOWLER, plays a dangerous double game in acting as Commission Palace spy for RIVARS, the patriot leader already referred to.

The fourth being is Signatory Arch-Hiscount Armajo SYNVORET, a nal of great integrity and power, a member of the Colony Worlds Council on Partussy. Having heard rumours of the corruption on Earth, he has just arrived in person as head of an Investigation Team to find how things really stand.

So a curiously subtle four-sided enmity is formed. Par-Chavorlem, unable to kill or bribe Synvoret, must deceive him in two ways : (a) by concealing the extent of his own wickedness, (b) by producing false evidence to show how intractable terrestrials are. Rivars and Towler naturally hate Par-Chavorlem ; they are prepared to reserve judgment on Synvoret until discovering how impartial he really is. At the same time, they have little basic trust of each other. Rivars is the guerilla leader pure and simple, tough but unable to grasp the complexity of City life. Towler is more complicated, and caught between the other three protagonists.

One of Par-Chavorlem's moves in the cold war of deception is to evacuate his big City and build and occupy one of regulation size some miles away—the size of the old one and the police spy network in it would instantly betray him to Synvoret. Because affairs are less well-organised in the new City, Towler is able to be smuggled out, with the co-operation of his butcher, to a secret meeting with Rivars in Channel Valley. There Rivars promises to send him, within three days, a tangible and incontrovertible piece of evidence which—when Towler presents it—will prove to Synvoret that there is considerable illegal activity on Earth.

Some other figures in the drama must be mentioned. Arm Marshall TEREKOMY is Par-Chavorlem's partner in crime and his right hand nal. On his initiative, five thousand bipeds have been shanghaied from their native planet Starjj in defiance of all galactic laws, armed, and dumped down on Earth to fight Rivars. This will create the illusion that civil war is raging : another move to hoodwink Synvoret.

Towler becomes unpopular with the other interpreters in the City because Par-Chavorlem appears to favour him. His one consolation is a girl, ELIZABETH FALLODON, newly forced into service as an interpreter, although even she has a leaning towards PETER LARDENING, another interpreter younger than Towler. Altogether, Towler is in an exigent situation by the time Synvoret and his party arrive on Earth in the trans-warp freighter Geboraa.

s i x

Almost everything was ready. The preparations for Synvoret's visit had affected every man and nal in Commission City. Now the community waited, with various degrees of confidence or apprehension, as Par Chavorlem prepared to put his colossal bluff into action and pose as a just man.

Outside the city, too, the effects of the visit were already being felt. On several estates, at lumber camps, in Sub-Commissions, on *Afrizzian* ranches, and at other places where the Signatory was due to call or stop for an inspection, an unnatural preparedness formed like ice.

And at about the same time as Synvoret's ship, *Geboraa*, grounded, Rivars' rebels launched their first attack against the encroaching Starrjans and were repulsed with heavy casualties.

Signatory Armajo Synvoret disembarked on Earth in a determined mood. He had covered half a galaxy and the last two objective years mainly in *jarm*, a trance-state practised by high caste Partussy officials. As a result, his mind was revitalised and his will to see justice done increased tenfold.

As soon as his ship touched down on the space port, the force field rolled in overhead, and in ten minutes the enclosed air was fit for nals to breathe. The main port of the ship rolled open ; Synvoret descended the steps as banners waved and a robot band unit played. Very few Partussians were present to greet him ; Synvoret noted the fact.

His entourage consisted of only four nals ; a valet ; a young secretary being groomed for better things ; a strong-armed and inarticulate bodyguard, by name Raggball ; and a senior member of the Psycho-Watch Branch, Gazer Roifullery. By the time these nals arrived home again, their combined travelling and additional expenses would have cost the Greater Partussian Government something like a megabillion *byaksis*. Here lay one of the prime reasons for corruption in the outer fringes of empire : the financial reason ; the cost of sending impartial investigators to any planet was colossal.

Synvoret arrived determined to find any corruption that might exist. He was aware that Supreme Councillor Graylix's main motive in sending him here had been to humour him. It placed him under an obligation which he could remove by proving Par-Chavorlem's guilt.

But from the first moment of his arrival, the business of lulling his suspicions went smoothly under way. The small reception committee which greeted him at the space port consisted of Par-Chavorlem himself, Arm Marshall Terekomy, and three under-officers, as well as a small body of nal civilians, one of whom read a brief speech of welcome. The speech was a cunning mixture of the usual phrases concerning aspirations, achievements and nal destiny. When this ceremony was over, the civilians came to clasp arms with Synvoret and mouth the age-old platitudes concerning the comfort of the Signatory's journey. All went as Par Chavorlem had rehearsed it, reckoning that to bore Synvoret was in part at least to reassure him.

Par-Chavorlem himself, drawing his illustrious visitor aside, was careful not to be too obsequious. His role was that of a harrassed commander, good at heart, but too burdened by the responsibilities of a rebellious planet to have much time for courtesy. Accordingly, the escorts bundled into a worn Army truck, while Par-Chavorlem led the Signatory and Gazer Roifullery to a road-flier of the type generally used for freight duties.

"Forgive this inhospitable vehicle, Signatory," Par-Chavorlem said apologetically. "During the emergency, any transport has to be pressed into duty. We have little in the way of luxury on Earth. I only hope we can make your stay here sufficiently comfortable. I'm sure that on Partussy . . ."

"I can do without luxury," Synvoret said.

They sped down one of the beautiful roads, under the misty arch of force, the landscape only blurrily visible outside. As they went, both nals were trying already to sum each other up. Idly, Synvoret—perhaps feeling some of that sinister charm which attracted Terekomy—wondered which of the sexes Par-Chavorlem was. The sex, male, female, or neuter, of a nal was not externally apparent, nor was it ever revealed except to the other potential participants in a mating trio ; nals, especially the original Partussian stock, were reticent in everything, and never more so than in this matter.

The space port was only a short way from the City. Soon they had arrived, and were sliding through the gates. At once the city enclosed them, the city was the whole world : and it was a Partussian world. Replicas of this city existed all over the galaxy ; they were all virtually identical, no matter the

nature of the planet outside. Partussians did not adapt to the native environment, preferring to carry their own environment with them.

Synvoret looked round with interest and some dismay. The days of his Starjjan and other commissionerships were long gone. He had forgotten how spartan these special cities were on unbreathable, lower class planets. Most of the buildings, besides being unabashedly utilitarian, were standardised and prefabricated. Par-Chavorlem had decided to take his guests on a tour of the city ; this they now made, the Commissioner muttering a word of information now and again.

The gauntness of everything was emphasised by a lack of paint. Gazer Roifullery, the P-WB man, made a polite enquiry about the point.

"Unfortunately rebel guns shot down one of our supply craft as it was coming in to port," Par-Chavorlem said, inwardly relishing the smoothness with which he could lie. "They are rather vulnerable to attack while hovering above the port before the force fields close over them. In this instance, the craft luckily contained nothing more than five thousand gallons of paint."

"You should indent for more," Synvoret said mildly. "If you will forgive an old-fashioned remark, the brighter colours will improve the spirits of your citizens. Partussians are traditionally colour-loving people."

"We have more to worry about here than paint, sir," Par-Cavorlem said brusquely. He was not without sensitivity where the feelings of his own race were concerned : much of his success on Earth was due to the gentle exploitation of the characters of those about him—of Marshall Terekomy, for one, so now he was gauging and testing the nature of this man who was potentially his enemy, and acting in harmony with that judgment. Already his opinion was forming ; he fancied Synvoret might prove a bluff and honest fellow possessing perhaps more crankiness than subtility, who would interpret a little brusqueness as the candour of a sorely tried campaigner.

Few people were about, as they drove through the streets to the palace, and those either Partussian semi-leisured class or terrestrial workers. Some of the former waved as the two vehicles swept past.

"What is the population of the City, Commissioner?" Synvoret enquired. He knew by heart the figures laid down in

the Statutes as maximum allowed to run a 5C colony like Earth : 150 Senior Grades, 1,800 Lower Grades, 200 Military, 2,000 Native All Grades, 4,500 Dependants Total All Grades. Grand Overall Total 8,650.

"At present, we are some ten thousand strong, Signatory. We are generally under strength, but at present we are also having to accommodate an armoured brigade sent from Vermillion HQ Castacorze to contain the native civil war, as well as some refugees from sub-commissions."

Synvoret remembered the difficulty of keeping open sub-commissions in time of trouble. 'Sub-Commission' was in practice merely the name of any town or village of a colonial planet where one or more local administrators happened to be. They were rarely fortified, and the presence of the administrators often made them the focal point of local troublemakers.

"I shall be interested to acquire the local picture in detail," Synvoret said. "The record as it exists on the Queen Planet is naturally likely to be out of date in several respects."

"After a small luncheon we are holding for you, a complete briefing session has been arranged," said Par-Chavorlem.

"Thank you. That should help me in assessing the situation when I speak to local observers."

Noting the stiffness in the other's voice, the Commissioner answered in kind.

"That you will be able to do from tomorrow, when I shall assign you a terrestrial interpreter. Until then no official programme has been arranged. We presumed you might wish to rest after your long journey."

"I am not fond of official programmes," was all Synvoret said.

The luncheon at the palace was frugal. Plain fare carefully cooked was served, with cheap Partussy-type wines in support. Par-Chavorlem reflected cheerfully that the affront done to his palate was more than compensated by the disappointment his guest showed in the sparseness of the table.

"I trust you were adequately fed on the ships which brought you here?" he enquired, tucking another mouthful of food under his arm.

"I was in *jarm* most of the time."

"Ah, a hungry business!"

After the meal, as Par-Chavorlem had announced, the briefing was held.

A team of grey-combed civilian experts reinforced their lectures with solids and stereomaps. They were thorough. They talked at Synvoret and Roifullery for over two hours, giving them a suitably false picture of Earth's affairs, aiming to convince them, among other things, that a planet whose tribes indulged in civil war was not oppressed : otherwise why did the tribes not unite against the conqueror ?

Par-Chavorlem did not sit through it. He marched out, impatient and nervous. Now the business of deception was under way, he was keen to get it over as soon as possible. He rang Terekomy on the private glimpse-globe.

"Have you asked the retinue when Synvoret leaves ?"

"The freighter *Geboraa* returns from Saturn in eight or nine days, dependent on the state of the space lane through the asteroid belt. It departs—with him—after ten hours' refuelling and maintenance."

"Better than we dared hope for. I feared we might have him round our necks for months."

Terekomy twitched an eye stalk encouragingly.

"Don't worry, Chavorlem. We'll soon have this old fool wrapped up. I've several little tricks to try on him."

"Just be careful," Par-Chavorlem said sharply. "Don't overstep the mark. You know I'm not entirely happy about this Starjj business. You heard him tell me at lunch he was actually on Starjj himself. Do nothing without consulting me."

He switched off.

This was really a game of bluff and double-bluff between him and his distinguished visitor. If Synvoret should discover any irregularities in the conduct of the Commission, he could—if he felt so disposed—make enough of them when he returned to Partussy to cost Par-Chavorlem his job. Charm must be used, as well as deception ; but to what kind of charm would the leathery old diplomat be most susceptible ?

He walked about his private room, his trained mind for the moment unfocussed. How did Synvoret tick ? . . . And from there, how did anyone tick ? The galaxy swarmed with ticking creatures, the rulers and the ruled, their forms many and ingenious ; and nobody could give you an answer to the mighty 'Why ?' of them. This problem had teased Par-Chavorlem since childhood, as another may be teased by a sexual problem.

On a table stood a bowl of Earth's flowers, pentstemons and marigolds mixed, a transplex dome over them to retard their

death in the Partussian air. Snatching up a dazzling scarlet pentstemon, Par-Chavorlem pulled it and daintily crushed it. It was living, it had lived. Purpose? Meaning? Reason? In his flexed palm, crumpled petals could not answer.

He pounded on a bell.

Terrestrial flowers were all display—like terrestrial men. It was not so with Partussian flowers or with nals. A Partussian flower resembled a stone, all its intricate and attractive parts hidden away; a Partussian concealed all his features but his eyes away under the folds of his arms, where none but a lover might ever discover them.

One of the servants appeared in response to his ring, a young terrestrial girl dressed in the olive green air suit that denoted service.

"Come here, Clotilda," Par-Chavorlem demanded. "Recite to me one of your poems in your native tongue while I watch you."

"Not again, sir," she begged.

"Yes, again, I command it."

He loomed over her, twice her height, and timorously, hopelessly, she began to recite in the language he would never understand. Snatching her up effortlessly, he peered at her, two swivelled eye stalks close to the glass of her helmet.

"Sometimes to confront a thing unknown,

To find a word beyond the world we know,

A new spirit with the old spirit's dying

Rises to confront us with the overthrowing

Of today's crisis, as instead it gives

To yesterday's defeats a victory glow;

So out of love . . ."

She babbled, he did not listen. In strained intensity he stared through the separating glass, drinking in the movements of her jaw, chin, eyes, lips, mouth, tongue. These things should be hidden away in all but the ultimate situation; yet here was a life-form, this flimsy, hateful, biped life-form, flaunting the bright moving bits of itself. It was obscene, revolting—yet Par-Chavorlem could not tear himself from the sight.

Only when the girl wept and struggled, and he had fed himself on the sight of her tears, did the Commissioner for Earth release her. These creatures did not always escape so lightly, but now he had other things on his mind. In particular, he knew he must speak cunningly to Towler.

seven

The briefing was at last over, the last question asked, the last answer given. The grey-combed lecturers put down their pointers and rolled up their maps. Signatory Synvoret and Gazer Roifullery returned to their private suite together.

"An admirably thorough briefing," commented the latter, who had taken tapes of the whole meeting.

"Thorough almost to the point of tedium," agreed Synvoret.

Tactfully reproving what seemed to him a superficial reply, Roifullery continued, "I was given an insight into bipedal life I never had before."

"I wasn't," Synvoret said dryly. "I received only a tripedal view of bipedal life. It is not enough to say that whereas Partussians never had nations and wars the terrestrials always had and always will have. Consider the different planets we evolved on. On Partussy: no great temperature extremes, no impassable mountain ranges, sluggish rivers which were highways rather than barriers, and above all, no dividing seas. The reasons why we have never been nationalistic, you see, are physical rather than psychological."

"It may be for this same reason that a biped is a more complex creature than we are."

Roifullery's comb rippled at this heresy, but he said nothing, contenting himself with reflecting that those who think themselves simple may well be right.

"Our comparative simplicity," Synvoret continued, "has led us into a position of domination over all discovered biped species in the galaxy. This is not to say we should feel the lack of . . . respect for them I detected in that lecture room."

To this also Roifullery made no reply. He felt that his superior had come to Earth determined to find fault. It was not an objective attitude; it would need handling carefully. He sighed—but silently.

The Signatory went to his suite with no intention of resting. For perhaps five minutes he relaxed into a *jarm* posture; then he changed into a less conspicuous uniform and went to find his own way out of the palace, Ragball his bodyguard following at a distance.

He emerged from a side door into a quiet courtyard, standing there for a moment to look up at the viridian sheen of the field above his head. Then he walked across the court-

yard to the gate. The guard at the gate recognised Synvoret, saluted, and let him and Raggball through.

Directly they were out of sight of the palace, Synvoret halted at the street corner. The bodyguard stopped obediently two paces behind him.

He had come to Earth meaning to get his facts straight from the horse's mouth. What he most wanted was to talk with one of the natives, although he realised from long experience that whatever a Commission native might say was unlikely to prove typical of opinion outside the Commission ; nevertheless, it would have its own value ; if only as a standard for comparison. The few people on the street were Partussians, many of them moving with the briskness of those coming off or onto duty. Synvoret ignored them.

The whole scene was watched by Arm Marshall Terekomy from a room in Police HQ. By punching a series of buttons, he could throw onto a screen before him telepictures of various strategic points of the Commissions street system. This was one aid to subordination neither Par-Chavorlem nor Terekomy had dared to give up when they built the new city. The elaborate spy system in every private room had had to go—that useful illegality would have betrayed the regime for what it was to any hostile enquirer—but a few public peep holes were deemed essential to order.

The coloured images of Synvoret and his bodyguard showed clearly on the screen.

Terekomy raised his arms slightly.

“Eager beaver,” he commented to his aide. “Out native hunting, if I know my diplomats. Well, he shall have one.”

He crossed to the adjoining room, a branch of the radio station. Here a live schematic on the wall represented a diagram of the city, its moving lights indicating the whereabouts of those Partussians and terrestrials who were Terekomy's—sometimes involuntary—‘shadow column.’

Identifying one of these lights with its individual number. Terekomy dialled it on the radio phone and began speaking at once.

“Calling you, E336. Listen in. Code Topstar and one follower are standing at the corner of Essrep and Fandandal. You are nearest shadow to them. Proceed to them, engage them as briefed. Make it good. I'll be listening ! Out.”

Terekomy returned to the screen in the other room.

In but a few seconds, a terrestrial rounded the corner, nearly blundering into Signatory Synvoret.

"I'm afraid we Partussians take up a lot of room," the Signatory said, speaking to him at once. "It's an odd law of the universe that tripeds always seem to have at least twice the bulk of bipeds. I suppose, by the way, you understand and speak Partussian?"

"Of course," the Earthman replied, with a hint of irritation. "It is a mark of culture to be able to speak your tongue, so vastly more elaborate is it than my own."

"I see. You admire Partussian culture then?"

"Are you a stranger here by any chance, sir?"

"It happens that I am. This is my first visit to Earth," said the Signatory.

"Very interesting, sir. Then you can hardly know the intense competition that we bipeds undergo for the privilege of serving in your wonderful Commission City, and so being in contact with a real civilization."

"Don't you find it irksome to be enclosed in that airsuit for most of the time you are in the City?"

"Even heaven must have its disadvantages, sir."

And with that the terrestrial nodded cordially and passed on. The Signatory made no attempt to analyse the conversation; he was almost wholly dazed by the biped's face. This was the first time for many years he had seen these creatures closely other than in photostats. He recognised the shock he was undergoing; it was chiefly a moral shock. Those terrestrials had their private features, their mouths and other orifices, prominently on display, in a manner distasteful to him. His reaction, in short, was a limited, egocentric one. "I'm out of training," he said to himself gloomily, "I'm getting old. Perhaps I ought never to have come here. But how obscene their faces are."

Ignoring Raggball, he walked heavily back to the palace and shut himself in his suite, ignoring even Roifullery.

For the first time, he felt fully his burden of responsibility. He had come to find out the truth: but truth was notoriously an elusive thing; on all the four million planets they had colonized, the Partussy had found only local variants of it. In a complex universe, truth like time might be both subjective and objective, with no reconciliation possible between them. Suddenly the Signatory was lonely and homesick; he fancied

that the air—even here in the heart of the Commission—was tainted with the beastly smell of oxygen.

All that evening he kept unsociably to his rooms. Par-Chavorlem was far from displeased with this. He had not dared to wire the signatorial suite, but hoped that his distinguished visitor might perhaps be feeling homesick. Synvoret's homesickness passed, however, as his analytical brain got to work.

His capacious, *jarm*-trained memory played him back word for word the brief conversation he had had with the terrestrial outside. He had no means of judging empirically, but intuitively he fancied the thing was a little forced. Some of the biped's phrases hardly rang true, even allowing for the fact that it had been speaking (but fluently) a language not its own. 'Even heaven must have its disadvantages'; how pat that was! And that phrase 'we bipeds'; would the member of an isolated 5C culture ever refer to itself in such a way? No, no, something phoney there.

Its arrival too: the only terrestrial about, arriving suddenly and as hastily as if ordered to the spot. And its departure: as if, belying all it said, it was glad to beat a retreat. Or could he be imagining too much?

Raising himself on one flange, Synvoret called in Gazer Roifullery for a two-man conference.

Par-Chavorlem was calling a two-man conference at roughly the same time. Gary Towler sat primly before him in a chair that looked like a doll's chair compared with the one the Commissioner used.

"We have known each other ever since I came to Earth," Par-Chavorlem said to his chief interpreter. "I feel we know each other well, as far as that is possible between alien races. No doubt you realise how I have always tried to do my best for your somewhat recalcitrant peoples. Now that best has been questioned.

"I tell you this in confidence, Gary Towler, that the Signatory who is visiting us has come on a tour of inspection determined to prove that there is widespread corruption under my command. This Signatory, Synvoret, is merely the pawn of Partussian high politics, which seeks to replace me with one of their number, a dictator who will inevitably crush Earth and all its peoples."

“So that was to be Clay’s ostensible attitude !” Towler reflected. “In a word : keep me here or you’ll get someone worse.” The threat was blunt, yet the line of approach was subtle enough. He nodded submissively, continuing to listen.

“You can see then, Gary Towler, that we have in our midst a threat to your future as well as mine. With your help, it can be met.”

“I am only a member of a subject race, sir.”

“With your help, it can be met, I say. You are my chief interpreter. You are going to be personally attached to the Signatory for the duration of his stay.”

“It will be an honour,” Towler said, reflecting that a lie to an alien diplomat was a service to Earth.

“An honour, yes—and a grave duty, which will not go unrewarded. Affairs at present—just at present—are unsettled here. You speak Partussian like one of us ; the Signatory naturally speaks no Earthian dialect ; in his contacts with all natives, he will consequently be in your hands. You must see to it that he hears no opinions that are ill-informed or spiteful, or lack understanding of the difficulties with which I have to cope. Anything that may be called prejudicial against our present regime must not reach Synvoret’s ears. In short, you must be interpreter *and* censor. Is this perfectly clear ?”

“Very clear, sir. If a native says ‘All our metal is exported,’ I translate this to the Signatory as ‘None of our metal is exported.’”

The comb on Par-Chavorlem’s turret head rustled. He stood up.

“See you are subtle about it, Gary Towler,” he said, towering over the Earthian. “I make you no threats, but you will be carefully watched.”

“I understand.”

“Excellent. One of Arm Marshall Terekomy’s officers will brief you thoroughly on what is required after you leave here, and you will report to the Signatory in the morning. Understood ?”

Towler stood up and nodded.

“Will that be all, sir ?”

“No.” The wide arm stretched out imperiously. “A further thing, and here I speak more personally. No terrestrial has ever been to Partussy the Queen Planet itself. If this impertinent visit passes successfully, I swear to you that you

shall go there afterwards, taking with you whom you will for company. Many oxygen-breathers live there in specially constructed cities ; you would be comfortable. What is more, you would be famous. As the only terrestrial, you could name your own price on threedee, dreemee or freak—er—personality shows. And, which would appeal to your altruistic nature more, you would be your planet's ambassador, able to speak freely in its favour. And if Partussy does not appeal, you and your companion can go to any Earth-type planet you care to name—any, without strings attached. Go away and think about this well."

Towler bit his lip. Here was the offer that Rivars had predicted Par-Chavorlem would make ; it was, as predicted, considerable. Compared with the patriot leader's offer of ten acres and a house, it was more than considerable. The mere promise of a journey half across the galaxy was enough to dizzy a temperament like Towler's.

Never for a minute had the little interpreter considered making a bargain with Par-Chavorlem ; yet just to hear his offer brought sudden pleasure. It showed him how even at his age, new doors might magically open ; and if Elizabeth would go with him through those doors . . .

So momentarily the Commissioner's words, though he had been expecting them, transfixed him, flooding him with surprised pleasure. This he felt was his cue to say, at such a brilliant ironic situation of his life, something brilliant and ironic. Towler was not made that way. He had a head full of words ; all he could summon up to answer in leaving was the phrase, " Thank you, sir."

He left the room shakily, the burst of pleasure fading. His path seemed no longer clear cut. The moral confusion in his mind was painful : yet rather than try to clear it he superimposed on it one question : could he not serve both Rivars and himself ? Would not, in other words, some way present itself whereby he could give Synvoret Rivars' piece of evidence (whatever that was and whenever it came !) without Par-Chavorlem's learning that he had done so ?

Desperately, Towler needed to think. Before going to see Terekomy for briefing on what was to be said to the Signatory, he turned into the interpreters' off duty room, taking off his helmet as he came through the air lock into it.

Silence fell.

Four people turned to survey his entry, suddenly stopping their conversation for it. Confused, Towler also paused, then went towards them. They were Elizabeth, Lardening, Chettle and Wedman, the latter two being generally attached to Palace Police.

Only Elizabeth smiled at Towler. She asked simply, "What's going to happen?" and he thanked God for her, not only for her friendship, but for her good sense; the men had obviously been about to attack the issue obliquely.

"Chav has appointed me the interpreter to be attached to Synvoret during his visit," he said.

Chettle grunted. Their reaction was hostile but without surprise.

"Then you should get the chance to tell Synvoret how bad things really are here," Wedman said.

"It may be difficult to get him alone. You know we'll be watched," Towler said, almost to himself. The words, casually spoken, brought Chettle up close to him. Cy Chettle was a little dark man with hairy fists, one of which he brought up to Towler's chest now.

"Listen, Gary, this week is our one big chance and we aren't going to muck it up. If you haven't got the guts to let this Synvoret know what goes on, bring him in here and we'll tell him. The big brass would soon boot out Chav if they found he was a dangerous fanatic."

Towler stepped back a pace, his face grim.

"Get your facts right, Cy. Chav's *not* a fanatic. Fanaticism burns itself out: Chav will never tire. Cruelty, extortion, oppression—they're not a way of life to him, they're a hobby. That's why he's more dangerous than you realise."

"If you feel like that, what are you waiting for?" Lardening asked more curiosity than anger in his voice.

"Because he *is* dangerous, because we are being watched, because the situation is more subtle than you know."

He should not have said that: the subtlety chiefly existed in his own personal situation. Yet it silenced them all except Elizabeth.

"I don't see the subtlety, Gary," she said. "The position is clear enough. Synvoret must get the facts that Chav is trying to hide. Chav's getting worse every day. He nearly killed Clotilda early this afternoon. Yesterday one of the computer girls disappeared, and it looks as if he took her."

Peter Lardening took gentle hold of her upper arm.

"I'll speak to Synvoret myself," he said. "I'm not afraid of any nal."

"Nor am I," Towler said in a choking voice, moving forward.

"Then why don't you prove it?" Lardening said, almost in a whisper. They were all rigid, Elizabeth staring fixedly at Towler. He clenched his fist and raised it. Lardening knocked it contemptuously down with an open hand.

"Go to hell, Towler," he said, "but see you fix Synvoret first." He started for the air lock door, Chettle and Wedman picking up their breathing helmets and following him.

"Don't you see, you fools," Towler shouted at their backs, "we don't have to do a thing—this signatory will find out how the wind blows for himself."

Lardening turned and beckoned to Elizabeth.

"Come on," he said impatiently.

"I think I'll stay here," she said.

The door slammed and she was alone with Towler.

Towler seized her wrists, tears of shame in his eyes. He needed to say so much: that from the humiliating scene his real self had been absent, that he was braver than they guessed, that he had great dreams for her, hope—

"Oh Elizabeth, I love you dearly!" he blurted. To his amazement he found she was in his arms, that this tall, beloved figure was pressed to his, that he was fervently kissing her neck. He drew his head back to look into her eyes.

They burned with the same excitement as his. The whole tigerish rectangle of her face was new, transformed. He was laughing, running a hand through her amazing hair.

"Why?" he asked. "Why, why, Elizabeth, why?"

"Seeing you facing them, I suddenly realised—oh, how can I say it?—a glimpse of your whole life—its loneliness, its integrity—oh, Gary—"

They were laughing until he kissed that soft, predatory mouth. For months he had been separated from her, when her work had taken her to a Levantine sub-commission. He knew she had seen more of Lardening than of him recently—yet always that peculiar sympathy had existed between them, making the time they were separated of little account.

His love and gratitude rose like a mist. She alone here knew the double game he constantly played.

"I saw Rivars himself last night," he murmured into her ear, so that any listening microphone could not pick up his words.

"Then everything's going to be all right," she answered. "Everything. I remember what you said yesterday—and we can surmount whatever comes."

To drown his doubts about that double-deep, he kissed her again.

e i g h t

Evening came again to the City, the lower angstrom output reducing the tensions generated during that day. Outside the City, true evening was still several hours away. On the Varne Heights, where men and those like men fought and died, the sun shone, laying a thin and useless compress on the wounds that bled there. The City kept its own time, was its own world, marked its own crises. For most of its oppressed terrestrial inhabitants, it might have been a spaceship adrift in intragalactic night, so slight was their contact with their native Earth.

Yet change—that virus insusceptible to any filter—exists even in the most unchanging environment. The City itself was not the old City, only a smaller and newer version of it. For the terrestrials who lived there, this change was minute, yet it was detectable, and made some indefinable difference in their lives.

And there was more evident change. A section of open ground hallowed by the name of Park lay at one end of the native quarter of the City. Here Par-Chavorlem, playing the enlightened despot, had caused some sort of a fair to be erected for the duration of Synvoret's visit.

As a fair it was poor enough. A nal had his own ideas of entertainment, and did not indulge them in public as most biped races were accustomed to do. Moreover, many of the attractions had not been adapted to the physical and mental capabilities of a subject race. There was a type of cinema, for instance, showing films only capable of resolution by a three-eyed species like nals.

For all this, the fair had a certain kind of success among the sensation-starved terrestrials of the City. At least the cafes scattered here and there about the grounds were well patronised.

Gary Towler sat contentedly enough at one of the tables, sipping a mild stimulant called tizzy. He had arranged to meet Elizabeth here; they had agreed that nothing resembling 'shop' should be talked, and already his mood was lighter than it had been for some while.

For the first time, he saw the City-dwellers in something like festive mood. Out in the crumbling Earth cities, some of the old ineradicable local cultures still survived; here in this alien acre, they had long ago died. Yet it was possible, sitting here under an awning waiting for an attractive woman, to believe that joie de vivre might spring up again. A few couples, primed by tizzy, were attempting self-consciously to dance to canned Partussian pop music—which sounded vaguely like a waltz played on old cans for a pauper's funeral.

Even better, in Towler's cafe the pop music had been switched off, and a group of laughing men and women were huddled round a singer with a home-made stringed instrument. Towler recognised the man—a florid and beefy road main-tenencer. Some of his song drifted across.

*I'm a City gal, workin' for a living
For a ole three-legged boss.
But a girl can't find a chance meant
For honourable advancement
When a nal don't know a gal from a hoss.*

*I'm a City gal, shut up in an office
Yearning to be free,
'Cos I ought to cut my losses—
I can't tell which sex my boss is !—
No, a nal can't be a pal to me.*

There was more, each verse growing gradually more ribald. Towler smiled, finding its very amateurishness endearing. A new folk song springing up perhaps! This was what a few days free of the ubiquitous spying did, and the ordinary citizen was quick to take advantage of it. How sad to think that in a fortnight they would all be back in the bigger, more tightly organized city.

He realised it was time Elizabeth arrived. She was a punctual girl, lacking that unfortunate coquetry which insists a woman should always keep a man waiting. Draining his tizzy, Towler stood up.

Leaving the cafe, he began to move among the amusements. Of a sudden he caught sight of Elizabeth across the Park. She was walking rapidly, with Chettle on one side of her, Wedman on the other. A stab of jealousy caught at Towler as he noticed the two interpreters. Hastily he began to follow, the jealousy yielding to a premonition of trouble.

The three figures moved ahead of him through the thin crowd. When Towler was nearly up to them, they disappeared into a round building. The Partussian fair was a sad thing; no bright colours lent their customary come-hither to the scene. A drab grey, the round building announced itself as a place of entertainment only by the neon sign saying JARMBOREE over its entrance.

Indecisively, Towler stopped. He had no wish to intrude. Ordinarily he might have turned away, but today a sense of crisis was upon him. Fishing out a three *byaksis* bit, he thrust it into the robot doorman, the door slid back, and he pushed forward into the jarmboree building.

Inside, the circular chamber was dimly lit. The cacophonous funeral waltz thumped oppressively at his eardrums. Some hundred odd seats, large ones built for nals, were ranged round a central machine; each seat was equipped with a kind of adjustable headpiece. This might have been a secret courtroom or even an operating theatre—certainly it hardly looked like a place of entertainment. It was deserted except for Elizabeth and the two police interpreters.

"Gary!" Elizabeth called, with a note of unmistakeable relief as she saw him enter. She started to come to him, but Chettle caught her by a slender wrist.

"Stay here," he ordered. "Towler, what do you want?"

"I want Miss Fallodon."

"We're talking to her. Clear off."

"No, wait a minute!" Wedman said. He approached Towler casually. "Perhaps you'd better stay here. What we've got to say does concern you indirectly."

"All I need—" Towler began. That was as far as he got. Unexpectedly, Wedman had flung himself forward and delivered a terrific blow at Towler's solar plexus. The interpreter doubled up and fell, groaning.

Elizabeth cried out. Chettle also was disconcerted. He had imagined till now that Wedman was the man who took the orders.

"What did you do that for?" he asked. "It wasn't necessary."

"It's obvious, isn't it? Better to have Towler where we can keep an eye on him. We don't know whose side he's on. Look at the way he followed us here—he's in Chav's pay most likely. The fewer risks we take the better. Come and give me a hand with him quickly. Elizabeth, you stay where you are. Your boy friend's going to be quite safe."

Together, Chettle and Wedman half lifted, half dragged Towler into the nearest seat. The blow had stunned him; he offered no resistance.

"Better buckle him in here," Wedman said.

There were arm and leg clamps which snapped over him. Derisively, Wedman brought the headpiece down till it fitted over the back of Towler's head, over his temples, half way round his throat.

"You'll do just fine there for a while," he said in a whisper. Then he surveyed the auditorium.

Just inside the entrance was a small control cubicle. Moving rapidly, Wedman went over to it and fiddled with switches. As he pressed one, the lights went off. Flicking them on again, he tried the next switch and the next. The entrance door slid tight.

"Good. Now we'll not be disturbed again," he said grimly, coming back to Chettle and the girl.

"Let me deal with Elizabeth," Chettle said in a quiet voice. The by-play with Towler had made him more uneasy than before.

"Go ahead. You know I like them plumper."

Chettle caught sight of Elizabeth's face, cold and still, only her eyes betraying her anger. He knew they had begun the wrong way to win her co-operation. In an unexpectedly gentle voice—yes, she certainly was an impressive creature!—he said, "Elizabeth, I'm sorry about all this, really sorry. We're not a couple of thugs, as you know. You've known us for a couple of years, but now there's a crisis on. Wedman's the nervous kind. Gary Towler's not hurt badly; we're not doing this for our sakes but for everyone's."

"The end as usual justifying the means," she said coolly. "All right, Cy, what do you want of me now you have me locked in here?"

"We want you to kill Par-Chavorlem tonight," Wedman broke in harshly.

The nature of consciousness had changed, turning itself inside out to observe only the reverberating pain messages which, liberating themselves from Towler's stomach, plunged all over his system like startled fish. Long before those messages ceased, another signal came, demanding attention, growing to dominance.

This signal told Towler he was a nal. Gradually he became, through his human pain, more and more aware that he was inhuman. He was ten feet high, he was cylindrical. He moved slowly across a vast room in which two other nals stood, their arms interlocking. Now they took hold of him, bending him backwards in a way grotesque yet delightful. Their eyestalks interlocked. Encouraged, he was laying a sort of egg, a slippery, black-streaked ball of thick jelly which the other two nals took up. The slippery ball was passed under one arm, then under another, moved with a curious dexterity, as if it was itself alive.

A horror like toothache gnawed Towler. Sluggishly, he opened one eye. He was still a nal, but now through the shapes of his two companions he saw three bipeds talking together. One was a female. With a terrible effort of mind, he recognised her as someone he loved. Even the name came back : Elizabeth.

At that the hallucination in his mind slightly slipped. Now he seemed to be both nal and human. Trying to clear his vision, he shook his head. Wedman had fitted the headpiece without care ; now it loosened a little.

He became more aware of himself, of his surroundings. Still he was partly a nal, executing now a strange kind of natal dance—but he also realised he was undergoing a ' jarmboree.' In this circular building, a mechanical adaptation of the principles of *jarm* trance had been applied commercially. The headpiece was inducing thoughts of a supposedly pleasant nature ; presumably if Towler had been a nal they would have been very pleasant.

Feebly, he tried to clear his head of the thundering images, but as long as he was clamped in the seat, the performance would go on. Now his arms were tightly interlocked with the other two nals ; they bore the egg between them, warm against their cylindrical bodies—yet at the same time he could hear something of what the three humans were saying.

"What is more, we can guarantee to get you safely away afterwards—right off the planet," one of them was saying.

"The freighter *Geboraa* which brought Synvoret leaves for Saturn tomorrow. The oxygen-breathers among its crew have shore leave here in the City tonight. Wedman and I have spoken to one of them who guarantees he can get you aboard unseen and hide you in an empty fresh water tank."

"I can't do it, Cy," the girl called Elizabeth replied—hers was the ideal beauty, hers the legs of a gazelle. "Attempts have been made on Chav's life before, all of them totally unsuccessful. A nal's a hard thing to kill. I'm not strong enough—their hides are almost bulletproof, their flesh too solid."

"We've got a foolproof scheme," the other of the two men said impatiently. "You are interpreter on night duty in Chav's office tonight. Provoke him into taking hold of you . . ."

They danced now intertwined, each with one arm extended, round and round giddily, the egg as a pivot between them. Their legs gouged into the earth, raining up dust, wrapping them in obscurity. The noise they made reverberated in every corridor of their being.

"... you know his curious streak about women. We'll give you a knife—we've got it here. When he raises you in his arms, strike under them. That's where his vital spot is, under his arms."

"I can't do it."

"We'll be on hand if anything goes wrong."

"I can't do it."

They were not tired. They were inspired. Now the egg was the centre of the reeling universe. And the universe was triple. All came in threes, all order, all abandon . . . Three gods, three bodies, three points to the compass.

"You can't expect me to do it, it's crazy!"

"We must. It's a lot to ask but it's the only way."

"It's a fool's way, Cy. This has all been argued before, any number of times. If Chav were even hurt, Terekomy would have every manjack of us in the City killed."

"Maybe. But with Synvoret here his hands will be tied."

"Nonsense! He'd kill Synvoret too and blame us for his death."

"No more arguing, Elizabeth. We've got to try this. It's chancey but we've got to try it. See your dopey-looking boy friend there? Either you agree to try tonight or I cut his throat."

"I can't ! You're crazy ! Cy, don't let him . . ."

"Towler'd be no loss."

"Don't, please !"

"Co-operate then, for God's sake !"

"Watch me . . ."

Through the fertility dance he saw them approach. But even the three were now one, the ultimate. They whirled, blind to the universe, twisted in a garter of their own making, boring with the sharp flanges of their legs into the ground from which they had come. And now their arms lifted high above their heads, lips touching, and no more secrets, no more secrets . . .

Even the heavy knife sharpened into a dagger which pressed against his throat meant nothing against the terrible union of that dance.

Even Elizabeth's painful cry did not fully pierce his trance.

Nothing could save him as Wedman leant forward—except the sudden bursting inward of the entrance door. Two of Terekomy's men stood there, lugging with them the fearsome Partussian version of a gun. They lunged forward with that graceless, seal-like walk.

Wedman's nerve went. Dropping the knife, he flung himself in a panic under the nearest seat, scrambling on hands and knees to escape. The gun exploded.

A square yard of the amphitheatre disintegrated. The jarm circuit was broken ; Towler's mind was suddenly free of that erotic whirl, and the clamps on his arms and legs snapped up of their own accord. Wedman burst apart into glutinous morsels of flesh and marrow.

The police lumbered forward. Cy Chettle stood trembling where he was until they reached him. He offered no resistance as they led him away into a waiting three-wheeler. It drove off. Silence fell.

Gasping, Towler pulled himself to his feet. Quite apart from any pain he experienced, he felt emotionally drained. He made his legs move. Stiffly, he went over to Elizabeth and put an arm round her shoulder. She had not stirred since the police broke in. Her face was white, her full lips sucked in. When he touched her, it was as if a spell broke.

"You see, we're spied on all the time," she said in a whisper. "How did they know what was going on in here ? How did they arrest—the conspirators and let us go free ?"

He laughed shakily, his courage coming back at the feel of her.

"Yet according to the labourers who helped erect these buildings, there was no wiring used but that required to work the actual device, the jarmboree . . . By heaven, Elizabeth, I have it ! A delightful bit of Partussy cunning ! In the headpieces, an electrode induces impressions into the mind. But it's also a useful spying gadget, a two-way device. It can receive outgoing impressions, too—in other words, see what's going on in my mind."

"It's a plausible guess," she said doubtfully.

"Darling, it's more than a guess. My blurred impressions of what Chettle and Wedman were saying to you must have been transmitted straight through to Police HQ here. Nice, eh ? As soon as they saw there was a plot against Chav, they came and nabbed the conspirators—just in time."

Now she was more relaxed. She took his hand, stroking it, looking at him closely. Her searching look resolved into a smile.

"And you, the real plotter, got clean away !"

"Fortunately I was too muddled to think about friend Rivars. So with a fine gesture of contempt they leave us to our own devices !"

As he mentioned the name Rivars, his mind clouded. The mysterious piece of evidence had still not arrived from the leader. Mastering himself, he smiled and took her arm. Then the dagger that Wedman had threatened him with caught his eye ; it lay gleaming dully in the aisle. Glancing guiltily round, he stooped, picked it up, and thrust it into his pocket. Then he took Elizabeth's arm again.

"It's still not late. Let's go and get a drink and something to eat at one of the new cafes. It'll do you good."

Sliding her hand into his, she walked beside him back into the Park. Now the place was almost deserted ; the appearance of the police had evidently knocked the heart out of everyone's enjoyment. Indéed, Towler thought grimly, what cause for enjoyment was there ? Tomorrow he would have to face Synvoret, the unknown quantity.

Despondently, as they turned into the nearest empty cafe, he set himself the task of being light-hearted.

They sat together in the cafe for an hour, talking or in companionable silence, until it was time for Elizabeth to go on night duty. By now their taut nerves had relaxed. Towler escorted her back to their official quarters before returning

home. The place seemed as drab and empty as the inside of a box.

Only Peter Lardening was in the off-duty room as they entered, his shift of work over. Glancing up at them both with raised eyebrows, he said casually, "So ! We hear you've had an eventful evening." He waved a hand at a notice still glittering wetly on the notice board.

Towler and Elizabeth went to read it. It announced simply that under the Colonial Conspiracies Act, Interpreter Wedman had been executed and Interpreter Chettle would be executed tomorrow for their involvement in a plot to murder high nal officials.

"Well ?" Towler said interrogatively, turning to Lardening. He disliked the expression on the younger man's face.

"Rumour has it that the police came to *rescue* you from Chettle and Wedman, that you summoned them."

"Rumour's wrong, Lardening. Do you think Chav cares which of us lives or dies ?"

"In your case I do. People in the Park witnessed most of the incident. Whatever you are playing at, Towler, tread very carefully, or somebody will see you're put quietly out of the way."

He looked at Elizabeth as he spoke and added, almost to himself, "And then who would look after this lovely creature . . ."

n i n e

Morning came, but with it no word or sign from Rivars.

Since his visit to Rivars' hideout, Towler had deliberately avoided all his underground contacts, lest either he or they were under suspicion. They would get in touch with him when they needed to.

He prayed that the evidence would soon arrive. It would jolt him into making up his mind as to what he should do. Until then, he could only carry on, playing the part that Rivars had instructed him to play—and wondering ceaselessly if Par-Chavorlem's offer could be trusted. Towler had no way of knowing that before the day was out a third offer would be made to him.

Whatever Rivars was doing, he was not idle. His troops, after a stiff engagement with the Starjian force, had driven them back into the broken territory of the Varne Heights. All the while, Terekomy's forces were holding a line to keep the

combat from swinging towards the not-so-distant City. Yet Rivars had foxed them. Leading a small mounted guerilla column himself, he had slipped through the Partussian lines and devastated the small oil town of Ashkar, from which much of the City's oil was drawn.

Ashkar, unprotected by force screens, suffered casualties—
nal and human. The blow to nal self-confidence and esteem was well-planned. Before the opposition could find him, Rivars' column was away again, fading into the night and the forest.

When Towler—primed by Terekomy and looking meeker than he felt—was brought before Synvoret and his retinue, the Signatory was preoccupied with the details of the Ashkar raid.

"You come of a bellicose species," were his first words to Towler.

"Yet we are not conquerors. We desire only peace, sir."

"Then why don't you accept the peace Partussy offers you?"

Towler fell silent. For as long as was necessary he must act like a contented colonial; Par-Chavorlem would know of it if he did not—his officers loitered here now in this pokey council chamber—and he would be whipped away, unable to help anyone even himself. His job must be to propitiate the Signatory as far as possible until the moment came to drop all pretences, reveal the incontrovertible evidence, and cast himself upon Synvoret's mercy.

Synvoret's hide, at least where it was not covered by his uniform, was a milky grey patterned with fine wrinkles. He loomed above Towler, adding his silence to the interpreter's, until at last he spoke.

"By doing such things as destroying oil wells you spoil your own material heritage. How does this affect you personally?"

"How can I be responsible for such an act?"

"That is far from being an answer, Interpreter, and I hope you have wits enough to know it. Now let me ask you another question. Suppose—supposition only, mind—you and I are as unlike inwardly as we are outwardly; for what reason then, when I am back on Partussy, should we not send each other letters?"

This baffled Towler, not knowing what order of answer was expected of him. On impulse, he answered with a faint smile, "Because there is no correspondence between us."*

* This is as near as one can get to a translation of Partussian pun

The old nal raised an arm slightly, his comb rippling.

"Not only does that show me your excellent command of our language, Interpreter Towler. It shows there *is* some kind of correspondence between us, if you terrestrials are capable of joking. Or perhaps it is an ability you caught from us."

It was Towler's turn to be silent, furious at this patronage, however pleased he was to find he had evidently passed some form of test. Synvoret patted him clumsily on the back, causing Towler to bump his forehead on the glass of his air helmet. As if this was a signal, Roifullery stepped forward.

"You may hold yourself in readiness to come with us out of the City, Interpreter," he said. "The Commissioner had arranged a full scale inspection of the City for us today, but we have postponed it because of this attack on Ashkar. The Signatory and I wish to go out overland to see for ourselves what is happening there. You will accompany us. The Commissioner will also be in the party."

This outing was not to Par-Chavorlem's taste. He had no mind to risk his own neck, nor was he keen to have the death of his distinguished visitor on his hands; *that* would look very suspicious far away on Partussy. Since Synvoret's request could not be refused outright, Par-Chavorlem laid every possible obstruction in the other's way, and it was not till mid-day that, Synvoret snipping through the last red tape, the small contingent moved off.

In one armoured car rode Synvoret, Par-Chavorlem and Towler; in another were Terekomy, Raggball and Roifullery. Escorting them came two high-powered meuron defence trucks, the next best thing to the impenetrable force screens—which of course could not be raised without heavy and elaborate equipment. They bowled smartly along one of the beautiful roads until reaching a certain checkpoint. Here they halted while the screens were damped, allowing them to drive through onto an unprotected—and inferior because native—paved way through chalky country.

For Towler, while the aliens sat in clumsy air suits, it was an absolute joy to breathe the cold breeze. The very meaning of life seemed to inhabit each lungful of air he took. This vital stuff Elizabeth should be breathing too.

"How long is it since you were outside the Commission City?" Synvoret enquired, turning to him. (How difficult it was constantly not to make moral judgments about the unconscious indecency of a biped's face !)

"Ten years, sir."

"Why aren't you allowed leave?"

"I am allowed it but refuse it. I have no connections outside the City." That was cunning, Towler thought: one lie for Chav, one lie for himself. "My parents, of the village of London died long ago."

"You have friends inside the City?"

"Naturally I have, sir."

"Are you a lonely man, Interpreter?"

"All men are lonely, sir."

"Does not your habit of answering uninformatively make you more lonely than most men?"

No answer from Towler.

Par-Chavorlem's delaying tactics in the morning had allowed Terekomy time to stage-manage the events of the afternoon.

Neither nal had any intention of letting the investigation team get near the real Ashkar. Their chief consideration here was discretion. A powerful nal family had purchased the Ashkar oil concession and settled on the spot. During Rivars' night raid, this family had been decimated, leaving two senior members to roar against Par-Chavorlem's folly. The truth was—he knew it as well as they—that indirectly they were as much victims of his oppression as the bipeds themselves, for all the financial advantages accruing.

These nals could have complained direct to Synvoret in his own language, nor would Par-Chavorlem have been able to stop them telling the truth (however savagely he might have shot them afterwards). Therefore Synvoret could only be allowed to believe he had been to Ashkar. Accordingly, a fake Ashkar was established in an area of perfect safety that had been cleared of Rivars' forces. The native labour which had been wounded at Ashkar was transported here to lend realism to the scene. Fires were started. Other people were brought from the City to increase the confusion. Partussian soldiery in operational kit moved about in business-like fashion, occasionally discharging annihilators at an imaginery enemy.

The armoured cars drew up, sheltered by a fern-covered bank.

"I don't think we'd better go any further, Signatory," Par-Chavorlem said. "We are only a few hundred yards from the firing line."

The party climbed down, standing in the road rather helplessly without speaking. Two miles away, beyond

foreground cover, stood a line of wooded hills, Their very silence seeming an indication of the presence of enemy forces. An ambulance sped hurriedly by, flying only two feet above the ground and making for Commission hospital. A burly nal officer came up, bowed smartly, and consulted with Terekomy in a monotone.

Synvoret and Roifullery stood sniffing the air like old war horses. The excitement of battle played its little drum in their veins, making them feel young and restless.

With a whiff of freedom in his nostrils, Towler too was restless. Rivars could not be so far away ; yet there was no way of contacting him—nor would the patriot leader know he was here, away from the City.

To complete Par-Chavorlem's spurious picture, a slow stream of terrestrial refugees (brought specially to the spot from the Commission for this performance) struggled past the two stationary vehicles, clutching bundles or humping sacks. Towler, as ignorant as the Signatory about what was really happening, felt his heart go out to these people.

"The attackers came through the woods behind us," Terekomy announced, "thus taking Ashkar from its least defensible side. As you heard in the briefing yesterday, the civil war had not spread this far—until last night. Obviously both sides are interested in the oil. We export most of it : they would put it to military use."

"Why was not your Arm in greater strength at such a strategic point?" Synvoret asked.

The Arm Marshall rippled his comb.

"Colonial regulations allow me only five hundred nals for the planet, sir. It is too little. But—we must abide by the regulations."

Towler felt a strong urge to vomit.

A tired group of refugees were moving past them. Gazer Roifullery pointed with his cane to an old woman staggering by with a suitcase, her face stained by sweat and dirt.

"Ask that one where she is making for," he said to Towler.

Halting the old woman gently, Towler translated the question for her. She listened, her eyes still fixed anxiously down the road before she turned to him. The look she gave him, although full of hopelessness, had nevertheless a little core of personal anger in it for him, a fraterniser with aliens. It jarred Towler as if, biting into a soft fruit, he had split a tooth on the stone.

"They took me from the Commission ; now I'll have to make my way back to the Commission on foot," she said. "And I'm not getting a *byaksis* for doing it."

Not entirely understanding this answer, Towler still had the presence of mind to give it the required propaganda slant when translating it to the Psyche-Watch nal.

"She says she is making for the safety of the Commission."

"Ask her what has happened to her home," Roifullery ordered.

The old woman stood there mulling over the question when it was repeated to her, disregarding the other refugees brushing past her.

"Tell the ugly bastard I don't know what he's talking about. He must know more about this stunt than I do. I don't know a thing."

"The old lady is dazed ; she does not seem to understand you."

"Ask her if her home has been destroyed. She must understand that."

"I don't know what is happening here," Towler said to her. "You must try to help me. Was your house destroyed in last night's attack ?"

"I've got one room in Commission City, which is okay. I was brought out here this morning and now I'm getting back. As to what's happening here, I tell you I know nothing. Any more silly questions ?"

Glancing at Par-Chavorlem's comb, Towler saw a certain tension there—the Commissioner was regretting not having briefed Towler thoroughly on the situation beforehand. Hesitating, playing for safety, Towler said to Roifullery, "She says that Rivals' men destroyed her house early this morning."

"Ask her where the rest of her family are."

"Where are the rest of your family ?"

"Oh, go to the devil," said the old lady, moving off.

"She says, all dead, sir," Towler reported.

His hesitancy-had lent the little incident a weight it would not otherwise have had. Synvoret had listened with absorbed interest. He now came forward, speaking in a low voice to Par-Chavorlem.

"Just how reliable is this interpreter, Commissioner ? He seems to me to be holding something back. I would like you

personally to interrogate one of these refugees ; ask them if they think we are taking stern enough measures against the rebels."

A moment of difficulty had slipped into something far worse.

Par-Chavorlem drew himself up stiffly.

"I have every faith in my interpreter," he said. "Some of these natives speak a villainous dialect, which no doubt made his task a little difficult . . ."

"Nevertheless, I would like you to interrogate one of these creatures," insisted Synvoret. "Try this fat creature approaching with the little one on its back."

This time there could be no evasion.

"I do not personally speak their barbaric tongue," Par-Chavorlem said with dignity. "They have many different dialects over the globe, all of them illogical."

Synvoret turned round and appeared to be minutely examining a bush. At last he spoke in a low voice.

"Commissioner, does it not seem to you that for some understanding of the native's habits, his laws, his customs, his religion, his ceremonies, his philosophy, his psychology, his literature, his history—for some understanding of all or any of these vital things, does it not seem necessary to you to have a knowledge of his language?"

"You are assuming, Signatory, sir, that an understanding of these things helps a governor to govern. On this wretched planet it is not so."

Synvoret's comb was flushed and angry.

"What you say is tantamount to an admission that you govern without understanding," he said quietly.

"Very far from it. Justice is one thing whoever it is applied to ; that assumption is the very basis of our legal and administrative systems."

A tremendous explosion to one side of them broke the tension. Earth, stones, and clods scattered high, showering the party. The whole group of Partussians dropped clumsily to the ground for protection, floundering in their air suits. After a minutes of silence, they raised their heads. Another explosion sent them prone again.

"The enemy are counter-attacking," Par-Chavorlem said. "That requires very little understanding. It is my duty, Signatory, to see you back to safety. If you please, we will leave now and return to the City as expeditiously as possible."

In that moment, Towler saw clearly that this whole manoeuvre was a deception. He could identify the noise of the explosion as a stereosonic one. The patriots did not possess these latest field weapons—which Synvoret would never have heard in action. The two explosions were therefore a diversion staged by Par-Chavorlem's own side; impressive but harmless. Towler recalled that Terekomy had quietly left their party a moment ago. The Arm Marshall had saved a trying situation with an impromptu bang.

Angrily, Towler remembered what the old refugee woman had said, and how her meaning was clear. Wherever they were, they were not near Ashkar. Whatever the truth was, Synvoret would not find it here—Towler himself did not know what was happening.

Now he was alarmed. Par-Chavorlem's plans, started two years ago, were maturing; unless a spoke was put in them, they would succeed.

As they bundled back into the vehicles without too much dignity, Terekomy returned, solid, slow, every inch a soldier.

"There's no danger, gentlemen," he said. "It just happens that we are within range of the rebel guns. If we withdraw rapidly up the next side road we might be in time to see our counter-measures."

They lurched forward. The side road climbed a hill. When Terekomy announced that they were out of the imaginary 'danger,' the party halted and looked back across the quiet countryside.

"Ah, the counter-measures!" Par-Chavorlem exclaimed, pointing ahead.

Over the line of wooded hills to their front played a momentary strange light. Valley's, streams, silent woods, all were picked out clearly for a second before vanishing entirely. Steaming red earth sagged and gaped like a broken mouth where no patriot had been. Ten square miles of country had been sacrificed to the Commissioner's little charade.

"Ah, give 'em a bit of their own medicine!" Gazer Roifullery exclaimed. His comb had turned very pallid. Towler also was pale.

Terekomy's five hundred toughs were more than ample. Fifty of them could reduce all Earth to red ruin in a week, given the encouragement. He was both impressed and shattered by this show of force.

So evidently were Synvoret and Roifullery. They rode back to the City in wrapt silence.

t e n

They were back in the impenetrable security of the City—and here, Towler felt, was where the greatest danger to himself lay. He now had no man he could call a friend. After the execution of Chettle this morning, he had been sent to Coventry. Elizabeth was the only one who would defy the ban and still talk to him.

He wanted to go to her. He was on duty and could not go. Boredly, he sat at the back of a small conference room while Synvoret indulged in a postmortem on his recent excursion. Towler hardly bothered to listen to his argument; since the Signatory had been provided with false premises, how could it matter what conclusion he came to?

In a while, however, a more ponderous note in Synvoret's voice made him sit up. The Signatory was rebuking the Commissioner.

"... I cannot help feeling you were ill-advised to let this civil war break out at all," he was saying.

"According to charter, we let these bipeds govern themselves as far as possible," Par-Chavorlem replied. "They are primitive by nature and pugnacious by disposition; if they elect to fight each other, then it is unwise to forbid them, or the wave of bad feeling turns against us. You must know how difficult it is to deal with a planetary uprising. For one thing, reinforcements from other Vermillion sector planets will always take too long to get here. So we prefer to let our terrestrial squabblers get on with it, containing the conflict by limiting their arms and movement. Ours must always be the gently guiding hand."

It was a smooth answer. Of the truth—that Earth was in actual fact united in hatred of Partussy and Par-Chavorlem—none of the nals present could catch a glimpse.

Gazer Roifullery said, "Though I think you should press Castacorze for more reinforcements now—in the main you are well advised to rule so liberally. Earth was once a frontier planet; it is no longer. I agree that full scale rebellions on anything but frontier planets are surprisingly difficult to put down."

"Why's that?" Terekomy demanded sharply. He had never had trouble in stamping down any show of insurrection.

"Why the distinction between frontier and colonial planets?"

"We have studied the problem carefully at Psych-Watch," Roifullery answered. "Imagine the expanding sphere of

Continued on page 112

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Partussian influence as a balloon being blown up—although space routes rather than air pressure cause its expansion. The balloon's surface represents our perimeter of conquest, the frontier planets. It is here we have to place the greatest concentration of our forces, as you know, Arm Marshall. Once a new planet comes inside the perimeter—in other words when it is subdued—a Commission is set up, and the main body of forces have to press ever on."

"Obviously enough, but—"

"The balloon analogy will also show you," Roifullery continued, ignoring Terekomy's interruption, "that the larger the Empire grows, the more thinly its forces are spread. As time goes by, we are less and less able to spare nals and weapons from the perimeter areas to cope with trouble far behind their lines. Too much pressure on the frontier: the whole balloon collapses. That is why, recently, some rebel planets have been allowed to triumph and retain their independence. Only a comparatively weak blow is needed to knock them flat again; but that weak blow is often not worth the expense. In future we must hold what we have. This is a lesson you should remember."

When at last Towler was freed for the evening, he sought out Elizabeth in a whirl of excitement. He took her into his arms, pulling her up, folding his arms round her, pressing her to him.

"You should have heard what Roifullery let slip, darling! Perhaps he had forgotten I was there—or perhaps after the poor show I gave outside this afternoon he thought I wouldn't understand. We are trying now merely to boot out Par-Chavorlem and get a just Commissioner in his place; but from what Roifullery says it seems that if we could only overthrow the nals, the Empire would make no further effort to reclaim us. Earth just isn't that important."

"I can hardly believe it. They're too grasping to abandon anything."

"That's what he said. Here under Chav with a rigid censorship it's impossible to know how the Empire actually fares. It must be more vulnerable than we believed. Oh, Elizabeth, if only we—"

He stopped.

"What are you smiling at?" he asked.

"This mood suits you," she said. "I've never seen you more animated. Darling, take care of yourself. Don't go looking for trouble!"

"I care nothing for myself, Elizabeth, everything for you. Earth means nothing to me, you are everything. I'd do anything to see you free and happy, anything!"

They kissed suddenly and ravenously, as if their lives depended on it.

"Ah, Gary dear, how curious the different view of you I've had in the last few days," she said at last, running a hand gently over his hair. "The breath of fresh Earth air has done you good . . . You know when I first was brought here two years ago I thought of you all as captives; I suppose I despised you. Now I see that you at least have so much more to you."

"I told you—I've got a tiger inside, even when I mew like a kitten," he said half-jokingly, drawing her down into a chair.

"Then I hope you were right when you said I have one in me too. You see—I've not—I've never been fully roused, Gary. Oh Gary . . ."

Again, as his hand caressed her, she kissed him. His senses rose up like smoke.

After a few minutes, he said to her, "Elizabeth, my love, let me speak to you in Partussian."

"Whatever for?"

"Curiosity really. You know how I feel about them, yet for me it's a pleasure to speak their tongue." Without a pause, he switched into that language. And at once it seemed as if his understanding of things altered, as if his perceptions as well as his words were translated to another plane. "It's such an ancient tongue, Elizabeth. After a while, you seem to feel its hoariness. Remember, it was established in its present form almost before there were true men on Earth. It's hard to credit isn't it? To me, it has become almost a physical force: it has helped form me nearly as much as my environment has."

"I don't wish to use it to you," Elizabeth said, speaking in Partussian nevertheless. "It has none of the softness in it I wish to find for you. Talking it, I understand why the nals have no poets."

"Yes, it fits their nature, inflexible and without ardour. Yet undoubtedly this language has been a factor in their universal success in conquest. It's a language for soldiers, for rulers, for administrators."

He broke off, laughed, and added in English, "But not a language for lovers, as you say. And at present I hardly want to talk at all. I'm mad, Elizabeth, mad. I could walk straight into Synvoret now and tell him everything!"

"You must be careful, Gary. Whatever happens, things have got to go on as they are until you hear from Rivals. He's the leader."

Towler pulled an impatient face.

"He's as fallible as the rest of us."

"That's not true. He wouldn't be leader if he was. We must wait until he sends the evidence for Synvoret."

But the evidence did not come, and so another vital day of Synvoret's visit passed.

Next morning, Towler was at the palace early. As he entered the alien personnel wing, the daily four-truck convoy was just leaving for the original City; it reminded Towler that without doubt Par-Chavorlem would have everyone back there within a fortnight, with many of their present potentials for freedom lost.

Nobody spoke to him. Passing Peter Lardening in the corridor, Towler thought he detected a slight nod, but all the other interpreters studiously ignored him.

All right, you curs, he told himself, you'll see . . . Yet he had to admit that what they would see he did not know. If he could find out how thoroughly Synvoret was being taken in by Par-Chavorlem's bluff he felt it might help.

On this point at least light was soon shed.

Half the morning was spent idling about behind Synvoret, his secretary, his body guard and Roifullery. They were inspecting the Treasury. Roifullery, aided by the secretary, was going thoroughly through the records. Synvoret addressed a few questions via Towler to the terrestrial assistants present, but made no attempt to conceal his boredom. When at last they were finished, Synvoret made off smartly for his suite in the palace.

"I want you to follow me, Interpreter," he said.

Towler did as he was told, trotting behind the four vast figures of the Partussians. He thought—as he so often had thought in moments of impotent fury during the last ten years—"If a Partussian physically attacked me, I should be helpless, even with a knife." A knife was the only weapon he had; he

Continued on page 116

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still nursed beneath his tunic the weapon with which Wedman had tried to kill him in the Jarmboree.

Once in the signatorial suite, the aliens removed their air suits.

Towler stood stiff and wary in the middle of the room while the nals relaxed. After ten years of forced mixing with them, it could hardly be said that he found them strange; yet as they sank into chairs, he felt a wonder at the flipperiness of their arms and legs and at the cylindrical immensity of their bodies. Gently but firmly, Synvoret shoed his secretary and bodyguards out of the room before turning to Towler.

"Now then, Interpreter Towler," began Synvoret genially, "you and I must get to know each other a little better. My visit to Earth is only a brief one—I have only five more whole days left—but there is every reason why in that time we should be friends. Why don't you come and sit down?"

"Thank you, sir, the chairs do not fit me—or I do not fit the chairs. I prefer to stand."

"As you wish. You see, Interpreter, very much depends upon the sort of understanding you and I reach—one might almost be dramatic and say that the future of Earth depends on it."

When Towler did not respond, he made an impatient movement with his comb.

"I do wish you'd sit down and make yourself as comfortable as possible, Interpreter. You understand that what I am going to say is quite unofficial and need not be repeated outside these walls. Do you recall the name of Wattol Forlie? He was a nal who held the post of Third Secretary to the Commissioner up until some two years ago."

"No," Towler said. "My work rarely brings me into contact with anyone but the First Secretary."

"No matter . . . I came here to make an investigation into terrestrial affairs. I asked for unescorted travel anywhere I wished, but the Commissioner thinks that owing to the present somewhat dangerous situation this is not advisable. Obviously, this curtails my freedom to enquire. My schedule for the next five days is full; nevertheless, it will hardly allow the opportunities for free observation that I required. You understand what I am saying?"

"Indeed yes." It was both obvious and encouraging. Synvoret had not swallowed Par-Chavorlem's bait yet. He was still thinking independently.

"You may not understand as well as you think you do," Roifullery broke in severely. He moved restlessly, curling a leg. "All the Signatory is saying is that naturally enough the Commissioner wishes to show us the most favourable side of his establishment. We require a neutral view—again, naturally enough."

Danger signs flashed between the two nals.

"I am here to look for trouble," Synvoret said. "For Trinity's sake, sit down, Interpreter."

"I would prefer to stand, sir, thank you."

"Don't mistake me. All I wish to do is confirm that everything on Earth is as well-run as it appears to be."

At this Roifullery's comb relaxed, but Synvoret continued.

"Some small points here and there, however, confuse the general scheme. You, for instance, speak our language very competently. Why were you so hesitant with the refugee woman at Ashkar yesterday morning? Were you translating accurately what she said?"

"Yes, sir. I was somewhat scared, sir, knowing we were in an exposed position." Oh God, how long would he have to lie! Neither his friend Rivars nor his enemy Par-Chavorlem knew what they were demanding of him.

Synvoret smoothed his comb and said, "I am not a fool, Interpreter. Having served in colonies myself, I am aware of some of the pressures you may be under. Let me put the situation to you in a nutshell. I am a plenipotentiary with the full backing of the Colony Worlds Council, which has sent me here to investigate a charge of corruption and, in particular, exploitation."

"It might be wiser, sir—" Roifullery began, getting up, but Synvoret ignored him entirely.

"Let me say at once, that a certain amount of exploitation is inevitable in any senior-junior relationship. With petty instances of this I am not concerned. What does concern me is how true may be some information I have that the Commissioner is virtually a dictator here, trampling over you terrestrials. Since you are the terrestrial with whom I have closest contact, I naturally question you on the point. You need have no fear about answering me as your conscience sees fit."

Towler maintained silence.

Synvoret's and Roifullery's eye stalks swivelled towards one another. The latter said something rapid that Towler did not catch. Synvoret nodded.

"Wait here a moment, Interpreter," he said.

He and Roifullery lumbered into the next room, leaving Towler standing uncomfortably in his air suit. One part of his mind registered the fact that these two nals were obviously not in complete accord. Mainly he was full of worry; the fantastic idea seized him that they might torture him into speaking, that they had gone to fetch their tough Raggball for that purpose.

Nobody could be trusted: he was not even sure of himself.

The nals were away for two minutes. Evidently they had reached some sort of agreement. Roifullery spoke.

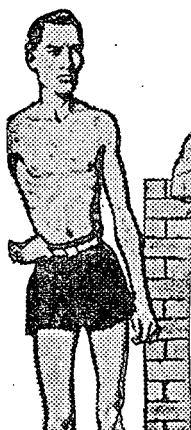
"Obviously it is in your own interest and in the interest of your species to be perfectly truthful with us. If your Commissioner is a just man, then you must say so to retain him here. If he is unjust, then you must say so to us, that he may be removed."

Again the ghastly sulphuric silence, in which Towler told himself that even these beings, seemingly honest though they were, were only Partussians, and therefore as untrustworthy as Par-Chavorlem himself; unlikely though it seemed in view of what had been said, they might even have been converted to Par-Chavorlem's way of thinking, and were now testing his loyalty; his moment of truth must, *must* wait until the irrefutable evidence came from Rivars. Sweat burst out on his forehead, damping the inside of his helmet.

"We appreciate," Synvoret continued after a minute, "that your silence may have been bought with threats or promises. So we must assure you, before you commit yourself, that anything you may reveal to us will be secret, and that you can—if you wish—leave Earth in the *Geboraa* when we do, to escape any possible retribution." Abruptly. Towler sat down on one of the vast chairs; he could guess what was coming next.

"To show how warmly I shall regard anything you may tell us in confidence, let me say this," continued the Signatory, "In my younger days, I was a Commissioner in this self-same Vermilion Sector of space. The planet Starjj was my responsibility. I still own by Imperial Charter one island on it, an island consisting of one-twentieth of the land-surface, and stretching from temperate zone to equator. Starjj is an

Continued on page 120



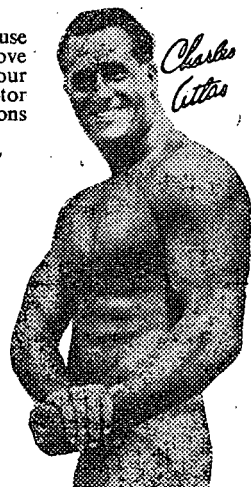
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oxygen-nitrogen planet much like yours, its gravity similar, its peoples peaceable—and bipedal like you. In return for your undivided co-operation with me here, I am prepared to take you, and any other terrestrials you name up to one dozen, to the island of Starjj I own. It will then be ceded to you and your heirs in perpetuity. You will be more than a free man; you will be a ruler in your own right. I have the power to do all this and more.

“I will tell you frankly that I am disappointed in finding you somewhat uncommunicative, but I realise you may have your reasons. Now you had better go away and think over what I have said. Tomorrow the Commissioner wishes me to accompany him on a hunting expedition, so I shall not need you. We will meet and talk here tomorrow night, when I hope you will have decided to give me your full co-operation. Leave us now.”

Gary Towler left in a sort of daze. Rivars’ offer, Par-Chavorlem’s offer, now Synvoret’s offer, each bigger than the last: they bewildered him, as the sudden sight of water bewilders a thirsty man in a desert, reaching down and soaking all the fibres of his being with their promise. Under the circumstances, the burden of deciding anything was so like a physical burden that he almost collapsed in the corridor outside the Signatory’s suite.

None of the three promises were to be trusted—Rivars’ perhaps least of all, for if Par-Chavorlem and all his surplus men were removed from Earth, in the uprising which would undoubtedly follow Rivars might well be swept away by rival leaders. And how much was Synvoret’s word worth? He after all was only a na . . .

Weakly he made his way out of the palace and through the streets towards Elizabeth’s flat. He must talk this over with her; with her he could sort out his troubled mind, her wits as deft as her long fingers.

Walking steadily, he found his mood lighten. He was neither a brave man nor a strong one; nor had he ever been.

Before going to Elizabeth’s flat, Towler took a long stroll to try and clear his mind first. It hurt him even as he walked to see how the other humans of the Commission now shunned him, how a shopkeeper’s wife pulled her toddling son out of his path.

All along, since before his secret visit to Rivars, he had determined to do everything possible for the oppressed people of his planet. Yet he was not alone any more ; he had Elizabeth to think of now. Given the chance, he might win her. For that, too, he would do everything possible.

Now he saw that these two objectives had miraculously ceased to conflict. If only Rivars produced that wretched piece of evidence before tomorrow night—then Towler had merely to hand it to Synvoret ; Synvoret would reward him with the island of Starjj, Par-Chavorlem would be on his way out . . .

With a pang, he recalled his doubts of Rivars' capabilities. Stifling them, he burst into a run. He could wait to see her no longer.

Elizabeth was not in her flat.

"Elizabeth !" he called.

No answer. No note. No sign.

All his insecurities came crowding back on him in new guise. He trusted no one. Everyone was against him—and in consequence against Elizabeth.

"My dear, I'm only an ordinary girl," she had soothed him yesterday, calming his words of love. But she was not ! To others—maybe. To Towler—all sweetness, all hope for the future. He knew it now as he stood calling uselessly in her empty room.

No terrestrial quarters were allowed any sort of communicational device with other quarters. He could not phone or radio, although the palace could summon him.

He left the block of flats at a trot, hurrying back to the palace. She should not be there : her brief afternoon's duty finished two hours before this. Still, he must look there for her. Seeing a pal police guard eye him from the opposite side of the street, Towler dropped into a walk.

Elizabeth was not at the palace. Only Meller and Johns were in the interpreters' room ; they would not speak at first, until under pressure of his agitation they were forced to take notice. Then they too became alarmed. They had not seen her since she left to go off duty two hours ago.

It occurred to Towler that she had perhaps gone to his flat. This was unlikely, for since Towler's banishment to Coventry, they had agreed that in future it was better for her if they met at hers. All the same, perhaps . . .

In an access of hope, he collected a new oxygen pack, fitted it, and set out once more. Silently, he called her name over and over to himself.

Supposing she had been arrested? There was never a dearth of trumped-up charges in the City. Supposing those vague rumours about Par-Chavorlem were true, and he had got her? Or supposing—well, supposing Rivars had her hostage, to ensure Towler's obedience? Were even the other interpreters to be trusted? Most of them hated him since the Wedman-Chettle affair. His thought grew wilder and more strained.

"Hey, you, Towler!"

Startled, he looked up. He was nearly home, half-running through the native quarter. His butcher had hailed him from the butcher's shop.

"I can't stop!" he said—stopping despite himself.

The man came to his door.

"My delivery boy's behind hand today," he said. "If you're going home, could you take the joint you ordered with you? I've got it here."

"Give it to me then," Towler said impatiently. He had forgotten he had ordered any meat.

As soon as the butcher presented him with a parcel, he hurried on, pressing impatiently into the air lock of his block of flats. Unclamping the face of his helmet, he sprinted down the corridor to his rooms and burst in.

No familiar graceful form awaited him. There was no note, nothing. Baffled, helpless, he stood where he was. Now no doubt existed in his mind that something horrible was closing in on him. He felt shakily for reassurance beneath his air suit. The knife was still there . . . if only he knew at whom to strike.

He hated, overflowing with it, as an animal stinks of hatred when it crouches in a trap.

His eyes fell on the butcher's package lying on the table where he had flung it. Suddenly he knew why the butcher had broken silence to speak to him. He had ordered no meat.

This was the evidence from Rivars!

Ironical that when it finally arrived he should feel so indifferent to the patriot leader and all his affairs. Nevertheless, he must make a move in some direction, if only to relieve his feeling of anguished impotence.

With a great effort, Towler picked up the package and took it into the kitchen.

"This had better be good," he said aloud. If it convinced Synvoret, perhaps he would help in the finding of Elizabeth. Any straw . . .

He undid the paper. Inside was canvas and he unwrapped that.

His face fell in sudden dismay as he uncovered the contents. Puzzlement, anger, fear, followed the dismay. Although there was no accompanying note, clearly this could have come from nobody else but Rivars. But what did it mean—had Rivars lost faith in him? Could it be some sort of a cruel joke? Above all, to whom had it belonged?

Clutching the table edge, Towler stared down in horror and despair. Amid the wrappings lay a bloody human foot, severed at the ankle.

To be concluded

THE LITERARY LINE-UP

John Rackham makes his debut next month, although he has appeared fairly regularly in *Science Fantasy* for several years. His story, "The Bright Ones," is an agricultural one set on an alien planet where crops have a life cycle of fifteen days—and, incidentally, the gestation period of the local 'inhabitants' is of similar duration. Both Bertram Chandler and Robert Silverberg make now rare appearances with interesting short stories and Brian Aldiss's serial "X For Exploitation" reaches its final climax with Gary Towler finding himself in a most peculiar set of circumstances.

Taken by and large an above-average issue.

Finally, has anyone any specific ideas as to just what they would like to see in our 100th issue, due next October? We are working on some ideas of our own . . .

Story ratings for No. 89 were:—

- | | | |
|-------------------------------|---------|--------------------|
| 1. Time Out Of Joint (part 1) | - - - - | Philip K. Dick |
| 2. Breaking Point | - - - - | Colin Kapp |
| 3. Nearly Extinct | - - - - | Alan Barclay |
| 4. Appropriation | - - - - | Robert Silverberg |
| 5. Peace On Earth | - - - - | Michael Barrington |



Dear John,

A personal reaction to your current editorial (March, No. 92) and to those other people who've been debating this same subject lately. (It's been worked over in *Speculative Review*, in the publications of the Institute for 21st Century Studies, and elsewhere).

Let's try and put the whole matter into perspective. What is it that in science itself catches the imagination of the public? The breakthrough, rather than the skilful, craftsmanlike application of existing principles. What makes the headlines in the daily papers? Not the biological details of the fish found five miles down; the bathyscaphe that did the dive. Essentially it's the invention and not the engineering which attracts people's attention.

In a sense, I have to class myself with the supporters of the "sense of wonder" faction—the people who maintain that something of the raw excitement of the early days of s-f is lost to us today. Well, naturally it must have—or why would people be indulging in this soul-searching, anyway?

Science fiction writers of today tend rather too often to prefer engineering to invention. The prolific giant of yesterday was Henry Kuttner, and his stories were built as frequently on pure colour and action as they were on ingenuity. The man who in terms of volume has dominated the scene since then was Bob Silverberg—now, of course, he's moved into other fields, but his approach typified the new development. It was the deliberate, intellectual mass-production of the pulp writer, crossed with an artificial slickness. And it's most likely that artificial slickness which is at the root of all our troubles.

But it doesn't have to be. Since the rot set in, we *have* had stories that are better than anything which has ever gone before. We've had Frank Herbert's "Under Pressure" and Paul Anderson's "We Have Fed Our Sea" (I re-read that yesterday — I would be inclined to offer it to anyone who asked me what the best of modern science fiction has to recommend it).

Too many writers in our field today—and too many readers, into the bargain—seem to have acquired a snob sophistication which demotes excitement and promotes flip cleverness. Mark you, I'm not pleading for excitement to the total exclusion of all else. I'm merely saying that time was when one could rely on any issue of any reputable magazine in the field to contain at least one story in the course of which one's eyes would unfocus, one's back would be seized by a cold shiver, and one would be hauled bodily into contemplation of another time, another world.

In your current issue, Donald Malcolm's "The Pathfinders" almost attains this stage. It's far too short, and too camouflaged with juvenilia (like these silly stars representing a million years! Humanity degrades its glories, but not that far, for heaven's sake)—but there's a stirring in it.

An article on architecture I read the other day said—quoting someone of authority—that sheer size is the simplest way to achieve sublimity. Right. Let's have some sheer size! Let's have the huge concepts of *Universe*, of *The Time Machine*, of *Against The Fall Of Night*. Let's stand back from man the individual and take another look at Man the race. Let's calculate with absolutes again—s-f was for a long time the only field in which absolutes were being considered at all, and in many ways remains so. When World-Wrecker Ed Hamilton was busy destroying the universe once in three months for *Captain Future*, a lot more people were reading s-f—and let's face it, the more people read it, the more likelihood there is of our not suffocating in our own waste products!

I tried to do something of this kind in *Earth Is But A Star* (Science Fantasy No. 29). The reaction that one provokes suggests to me that my view is at least a defensible one.

John Brunner,
London, N.W.2

Dear John,

Regarding your "Plot-Nots" Editorial in January and Dr. Arthur Weir's reply in February, I have some words for your critic.

Dr. Arthur Weir, you are a hard man to rebutte—or even come to grips with. You list your Plot-Nots, but tell not why you have picked them. The inference is that stories in these categories just can't be good, however you give no reasons at all for your suppositions. It is not enough that you *think* these

plots shouldn't be used, you must give us some reasons why not.

Editor Carnell has occupied himself with your Plot-Nots (1) and (2). I'm worried about (3) for the obvious reason you have a story of mine nailed to the walls as the Horrible Example. The Woman Scorned is a pitiable example of fury as compared to the writer with his egoboo trampled.

The way I read it, you are against computers capable of thinking qualitatively. Why? Isn't this one of the prime goals of the lab boys with their homeostasis systems, feedback for internal self-checking and such. They are working hard to get computers out of the great-big-adding-machine class. Do you want us to ignore all that labour as story material?

Or do you dislike this type yarn because the gadgets think "ahead of their creators?" I'm quoting you now. You don't mind when our cars go faster than we can run, ships faster than we can run, etc. Our machines always do better than we could by ourselves—that's why we invent them. They even do things we *can't* do, (rockets, radar). These things don't give you any trouble, so I can only assume you are against the demonic computers because they invade our sacred grounds of higher reason. Don't let that bother you. They think and we think—and at times they seem to be thinking better. But that's no reason for feelings of inferiority. They think that way because we constructed them to do that job. They can't build other computers—or men—so we are still top hounds in the evolutionary squabble.

I say all this in spite of the fact that my story in question, "I See You" was *not* about computers thinking qualitatively ahead of their creators. (A prize of small value will be given to the first reader who can tell what it *was* about).

Plot-Nots could better be defined as cliches. If you mean you are tired of stories about computers who are nothing more than neurotic twelve-year olds disguised as machines, I agree completely. But the list would be endless that contained all the stories we are tired of. Because it would contain *every* science fiction idea. Every plot is a cliché in this field.

I'm sure there isn't a fan or s-f writer alive who hasn't had some new enthusiast in the medium come rushing up with a Great Idea for a story. Invariably it is some tired bit of nonsense that was worked to death years ago. If pressed, the s-f devotee can usually come up with at least two stories he has read that embody this "new" idea. One good and one bad.

With this in mind, here is my advice to would-be contributors: *Every idea you can think of has been done before. If you want to re-do it well enough to sell, go away and read some more SF. At least 50 novels, 100 anthologies, and 200 magazines. Examine all new ideas in the light of past stories.*

Of course there are still new ideas to be uncovered—but I wouldn't tell the newcomer this because he hasn't the discrimination to recognize them. This is not snobbery, but fact. Undergraduate astronomers are not encouraged to develop their own cosmological theories. The s-f apprenticeship is no shorter or easier.

Harry Harrison,
Sjaelland, Denmark.

Dear Editor :

I do love "Now That" letters and the November 1959 issue (No. 88) contained a real cabinet piece. A jolly good job you printed it ! Want another beauteous example ? Here you are :—

"Dear Ed : *Now That* Mr. K. and John XXIII have concluded the concordat joining the two doctrines into the 'cath-comm-combo' dogma, were it not high time you stopped your insidious attack on the combo by allowing your authors to write their science fiction stories against a tacitly assumed background of agnostic plutocracy ?"

Joking apart—I am in parapsychology research and it has not come to my notice that Dr. Rhine ever committed professional hara-kiri. When is he supposed to have done it ? I would be most grateful to your correspondent for elucidation.

Kenneth Talbot,
Zurich, Switzerland.

Dear Mr. Carnell,

I must confess that I am open to be shot at, because my statement on Dr. Rhine's work was the result of what was openly said before what must have been a few million people at a session of the BBC "Brain's Trust" which had the science men as members.

During the discussion on telepathy (or allied subject) it was said that Dr. Rhine had been brought to revise his mathematics, could then no longer get results, whereupon he had shut himself away and no-one could get to see him on the subject. That is the whole ground for my statement. It seemed to me

that I could safely repeat what such high authority had said. If necessary, I dare say it may be possible to get the BBC to let us have exactly what was said.

I must confess I've been a little uneasy about my ground there ; I should have phrased my opening remarks differently. On the other hand there's nothing like a resounding flat statement for raising the hackles !

F. Haller,
Derby.

Dear Mr. Carnell :

I see in your editorial in the December 1959 issue of *New Worlds* that you mention " a shortlived edition of *Astounding* in Sweden," that's wrong. If you are receiving *Science Fiction Times* (UD ED) you should have seen that I some issues ago reported that DENMARK had a shortlived edition of *Astounding*, only 6 issues out, it folded in September 1958, due to little interest of SF in Denmark.

Sture Sedolin,
Vallingby 4, Sweden.

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